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Author(s): Kate Victoria Pinkney

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THE INFANT FEEDING PRACTICE OF GYPSY AND TRAVELLER WOMEN IN
WESTERN CHESHIRE PRIMARY CARE TRUST AND THEIR ATTITUDES
TOWARDS BREAST AND FORMULA FEEDING

Dissertation submitted to the University of Chester for the Degree of Master of
Science in Professional Practice in part fulfilment of the Modular Programme in
Professional Practice

KATE VICTORIA PINKNEY

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ABSTRACT

Gypsies and Travellers are described as the most socially excluded group in British society (Van Cleemput and Parry, 2001). Current research acknowledges that this community has poorer health and experiences significant health inequalities compared to the United Kingdom (UK) general population (Parry, Van Cleemput, Peters, Moore, Walters, Thomas and Cooper, 2004). This study investigates the early infant feeding practice of Gypsy and Traveller women in Western Cheshire Primary Care Trust and their attitudes towards breast and formula feeding. These topics were selected as they are currently unexplored in research and the Department of Health (2009) recognises that choosing to breastfeed infants plays an important role in improving maternal and child health and reducing health inequalities.

This study was undertaken using quantitative research methodology. Two structured questionnaires were administered. The first questionnaire was completed by all Health Visitors employed by Western Cheshire Primary Care Trust. This questionnaire established that most Gypsy and Traveller women in Western Cheshire Primary Care Trust chose to formula feed their infants and the breastfeeding rate in this community was very low. The breastfeeding rate was found to be 2.7% at birth and 0% at six to eight weeks. The second questionnaire was completed by approximately 50% of the Gypsy and Traveller community which met the inclusion criteria. The Iowa infant feeding attitude scale was completed as part of this questionnaire. This questionnaire showed that Gypsy and Traveller women in Western Cheshire Primary Care Trust had a more neutral attitude towards early infant feeding than was expected. It demonstrated that 45% of the women surveyed had a neutral attitude score. This is significant as research suggests that women with neutral attitude scores are not fixed in their early infant feeding intentions (Dungy, McInnes, Tappin, Wallis and Oprescu, 2008 and Sittlington, Stewart-Knox, Wright, Bradbury and Scott, 2007). This therefore implies that the infant feeding practice of these women could potentially be amenable. This study therefore concludes that implementing focused interventions aimed at promoting breastfeeding could potentially increase the community's breastfeeding initiation rate. This is important as increasing the breastfeeding initiation rate would consequently help improve the local Gypsy and Traveller community's overall health and assist in tackling the known health inequalities.

DECLARATION

This work is original and has not been submitted previously in support of any qualification or course

Signature.....

Printed Name.....

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LIST OF ABBREVIATIONS

Cinahl- Cumulative Index to Nursing and Allied Health Literature

DH- Department of Health

GP- General Practitioner

IIFAS- Iowa Infant Feeding Attitude Scale

IRAS- Integrated Research Application System

Medline- Medical Literature Analysis and Retrieval System Online

UK- United Kingdom

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1. INTRODUCTION

Gypsies and Travellers are one of the oldest ethnic minority groups in the UK (Oakley, 1983). Estimates suggest that the UK population of Gypsies and Travellers is between 200,000 and 300,000 (Parry et al., 2004). In the UK, this ethnic group mainly consists of Irish Travellers, English and Welsh Romany Gypsies and Scottish Travellers (Van Cleemput and Parry, 2001). Each of these individual groups has their own separate ethnic identity evident for example by their different spoken languages. However they share many features of a common cultural identity as Romani people or Traditional Travellers (Parry et al., 2004). For the purpose of this research the term Gypsies and Travellers excludes New Travellers as this group does not share the same cultural heritage.

Gypsies and Travellers have been described as the most socially excluded group in society (Van Cleemput and Parry, 2001). In the UK, healthcare policy has emphasised the importance of targeting socially excluded groups and tackling existing health inequalities (Marmot Review Team, 2010, DH, 2004a, DH, 2004b, DH, 2003a, Acheson, 1998). However, literature searches on Gypsies and Travellers in the UK highlight the lack of high quality research and information available about this community (South West Public Health Observatory, 2002 and Dion, 1998). Within the National Health Service data is not available on Gypsies and Travellers as statistics are not routinely collected about the health needs or requirements of this ethnic group (Cemlyn, Greenfields, Burnett, Matthews and Whitwell, 2009). The most comprehensive research study available suggests that when compared to average UK residents, English speaking ethnic minority groups and socio-economically disadvantaged White UK residents Gypsies and Travellers have poorer health and

significantly more self reported symptoms of ill health (Parry et al., 2004). The study concludes that in England inequalities in health exist between Gypsies and Travellers and their non Gypsy and Traveller counterparts even when accounting for deprivation and social exclusion.

The Department of Health (2009) recognises that early infant feeding choices affect maternal and child health and impact health inequalities. Choosing to breastfeed infants is known to play an important role in improving health and reducing health inequalities (DH, 2009). Ascertaining the infant feeding practice of Gypsy and Traveller women is therefore important as if breastfeeding rates are found to be low, improving its uptake would help improve the community's overall health and assist in tackling health inequalities.

This research investigates the infant feeding practice of Gypsy and Traveller women and their attitudes towards early infant feeding. The literature review revealed a need for this research as there is a dearth of available published statistics and research related to early infant feeding practice in the Gypsy and Traveller community. Only a few small scale studies were identified which reported anecdotally that breastfeeding rates in the community are low (Oakley, 1983, McCann, 1987, Reid and Taylor, 2007 and Dion, 2008) however no quantitative data is available.

In the UK, government policy advocates breastfeeding as a desirable population norm. In 2010 the breastfeeding initiation rate in England and Wales was 81% (Health and Social Care Information Centre, 2011). The Department of Health (1999) supports promoting breastfeeding particularly amongst populations which have a low breastfeeding rate. It states that choosing not to breastfeed contributes to the

increased mortality and morbidity observed amongst the lower socio-economic groups and it is recognised that improving breastfeeding rates would positively impact the occurrence of at least two health priority areas, which are cancers and coronary health (DH, 2003b). It is therefore important that the current breastfeeding rate within the Gypsy and Traveller community is identified as if the rate is low then this is an area that could be targeted by public health initiatives. Public health initiatives which target pregnancy and the first few years of a child's life are known to be more effective as during this period adults are more receptive to learning and making changes (DH, 2009).

This research also investigates the attitudes of Gypsy and Traveller women towards early infant feeding. This subject is explored as it is also unexamined in current research and obtaining this information is important in order to contextualise the quantitative infant feeding statistics obtained. Understanding maternal attitudes towards early infant feeding is essential if public health initiatives are to be implemented as having this knowledge supports the development of improved, more culturally attuned breastfeeding promotion programmes (Dungy et al., 2008).

This research specifically examines the attitudes and practice of Gypsy and Traveller women registered permanently with a General Practitioner within Western Cheshire Primary Care Trust. Western Cheshire Primary Care Trust has been selected as the researcher is employed by the Trust and has knowledge and access to the local Gypsy and Travelling community. The exact population of Gypsies and Travellers permanently registered in Western Cheshire Primary Care Trust is not specifically known (Sharples, 2007). However the bi-annual count of Gypsy and Traveller caravans established that in January 2008 there were 151 caravans belonging to the

Gypsy and Travelling community resident in Western Cheshire Primary Care Trust. This figure is however acknowledged to be a rough estimate of the actual population as it does not take into account members of the Gypsy and Traveller community that now reside in housing (Sharples, 2007).

The results of this research will provide Western Cheshire Primary Care Trust with useful local data as it will give a more reliable measure of the local Gypsy and Traveller community with children under five. It will also provide the Primary Care Trust with current infant feeding data and information about maternal attitudes towards early infant feeding which may help them achieve the Public Service Agreement indicator related to increasing the prevalence of breastfeeding at six to eight weeks (HM Government, 2008). The findings of this research are directly applicable to the Gypsy and Traveller population within Western Cheshire Primary Care Trust. In the future this research could be expanded and rolled out nationally in order to confirm whether the information obtained locally from the Gypsy and Traveller community is applicable on a national level.

2. LITERATURE REVIEW

The literature was initially identified using the health databases of the Medical Literature Analysis and Retrieval System Online (Medline) and the Cumulative Index to Nursing and Allied Health Literature (Cinahl). Following this initial search, further relevant articles were obtained by examining the reference lists of selected articles. The literature was searched under three separate topics which are the health status of Gypsies and Travellers, infant feeding practice of Gypsies and Travellers and infant feeding and the influence of parental attitudes on early feeding choices. The literature reviewed in this section will be discussed under these headings. A search history is provided at the beginning of every section. Initially the health status of Gypsies and Travellers is researched. This is done in order to contextualise this research amongst the wider research literature on Gypsy and Traveller health and in order to establish the quantity and validity of available research.

2.1 The health status of Gypsies and Travellers

A literature search was completed on Medline and Cinahl identifying research articles with gyps*, gips* or traveller and health in their title and abstract. No parameters were set for the date however the search was limited to articles written in English. The literature search identified eighty five articles on Cinahl and two hundred and sixteen articles on Medline (see Appendix 1 for the search history). From the combined database searches sixty two articles were found to be relevant to Gypsy and Traveller health in the UK. Following this search a further nine articles were obtained by searching through the reference lists of the selected articles.

The literature examined suggests that overall the health status of Gypsies and Travellers in the UK is poorer than the national average and inequalities in health exist between Gypsies and Travellers and other UK residents. Some examples from research include reports of Gypsies and Travellers having a reduced life expectancy (Barry, Herity and Solan, 1989), increased rates of child and maternal mortality (Linthwaite, 1983), more childhood accidents (Pahl and Vaile, 1986), higher rates of depression and anxiety (Parry et al., 2004), more low birth weight babies (Crout, 1987), they receive less immunisations and are therefore at higher risk of contagious diseases such as measles (Feder, Vaclavik and Streetly, 1993, Cohuet, Bukasa, Heathcock, White, Brown, Ramsay et al., 2009) and have an increased risk of death from coronary heart disease (Hawes, 1997).

A closer analysis of the literature revealed however that most of the research and statistics available about the health status of Gypsies and Travellers does not originate from well designed, robust research (see Appendix 2 for literature review table, which contains an analysis of the most pertinent primary research papers on the topic). Most of the studies reviewed were over ten years old and contained weak methodology. The South West Public Health Observatory (2002) commented that despite the methodological weaknesses of many studies on Gypsy and Traveller health the statistics obtained from these studies are frequently cited in research. These views about the weaknesses of the literature are further emphasised by Hawes (1997) who reported that the available literature “does not represent a picture of “evidence piling up” so much as a patchy and ill understood phenomenon (p17).”

More robust research has however been produced over the last ten years by researchers from the University of Sheffield (Van Cleemput and Parry, 2001, Parry et

al., 2004, Van Cleemput, Parry, Thomas, Peters and Cooper, 2007 and Peters, Parry, Van Cleemput, Moore, Cooper and Walters, 2009). Their research, funded by the Department of Health, directly compares the health status of adult Gypsies and Travellers to other UK residents which include specific comparisons to socio-economically deprived white UK residents and other English speaking ethnic minority groups. Their research concludes that adult Gypsies and Travellers have significantly poorer health and significantly more self reported symptoms of ill health compared to all these groups. Their study concluded that inequalities in health do exist between Gypsies and Travellers and their non Gypsy and Traveller counterparts, even when accounting for social exclusion and deprivation. The research does however acknowledge some methodological limitations, which include issues surrounding the samples representativeness, the opinions of men being underrepresented and recognition that the measures used to determine the community's health status were based on self reports rather than objective measures.

The research produced by researchers from the University of Sheffield has however improved the standard of the available literature on the health of Gypsies and Travellers and has begun to address some of the gaps present in the research literature. However, although research has begun to more robustly investigate adult Gypsy and Traveller health there are still many more areas of the communities health that need to be explored and as identified by Cemlyn et al. (2009) there is still a lack of comprehensive data available on the health of children.

Following this literature review the search was narrowed to focus on the infant feeding practices of Gypsies and Travellers. This area was selected as the Department of Health (2009) acknowledges that improving breastfeeding rates can

play an important role in improving both maternal and child health and in reducing health inequalities. This area is therefore important to explore amongst Gypsies and Travellers as if breastfeeding rates are shown to be low, targeting this area may improve the communities overall health and contribute to the reduction of the known health inequalities.

2.2. Infant feeding practice of Gypsies and Travellers

A further literature search was completed on Medline and Cinahl identifying research articles with gyps*, gips* or traveller and infant feeding, breast feeding, bottle feeding or artificial feeding in their title and abstract. No parameters were set for the date however the search was limited to articles written in English. The literature search identified one article on Cinahl and ten articles on Medline (see Appendix 3 for search history). From the combined database searches one article was found to be relevant to Gypsy and Traveller infant feeding practices in the UK. Following this search a further five relevant articles were identified and obtained through wider reading about the health of Gypsies and Travellers.

This literature search demonstrates the lack of available information about the infant feeding practices of Gypsies and Travellers (see Appendix 4 for literature review table). Of the articles reviewed only three had a research base and only one of the articles had infant feeding as its main focus. All of the articles with a research base collected data through qualitative measures with small sample sizes. The article which focused specifically on infant feeding was written over twenty years ago, had a sample size of five women and was not presented as rigorous research. As for example, minimal information was provided in this study on the methodology and

sampling used by the researcher, the results were not clearly presented, no limitations were discussed and there is no reference to ethical approval being granted. At present there is also no quantitative data available about the infant feeding practice of Gypsies and Travellers.

All of the articles obtained from the literature review indicated that the breastfeeding rate amongst Gypsies and Travellers is low (McCann, 1987, Rhodes, 2005, Reid and Taylor, 2007, McLeish, 2008, Dion, 2008 and Haines, 2008). Reid and Taylor (2007) reported in their study that “bottle feeding seemed well rooted in Traveller culture... [and that the act of breastfeeding was] “actively militated against” (p.254). Dion (2008) also suggested in her qualitative study that the community’s aversion to personal matters and the presence of social taboos may play a significant role in the poor breastfeeding rates observed in the community. This belief is also supported by McLeish (2008).

The absence of research and statistics about the infant feeding practice of Gypsies and Travellers highlighted by this literature review provides evidence for proposing the need for further research on this topic. This research therefore will investigate this area and provide local statistical information about the infant feeding practices of Gypsies and Travellers. This study will also explore the attitudes of Gypsy and Traveller women towards early infant feeding. This area has been selected as the community’s attitude towards early infant feeding is also unexamined in research and providing this information will help contextualise the quantitative infant feeding data once it is discovered.

2.3. Infant feeding and the influence of parental attitudes on early feeding choices

Breast milk is accepted worldwide as the optimal choice of food for newborns (World Health Organization Department of Nutrition for Health and Development, 2002 and American Academy of Pediatrics, 2005). It is associated with a number of health benefits for infants which include improving their nutritional, immunological and neurological outcomes and protecting them against health problems which include diabetes, obesity, leukaemia and a number of childhood infections. Breastfeeding is also recognised as having a number of health benefits for mothers including reducing maternal risk of conditions like osteoporosis, cancers and arthritis (Unicef, 2011). In the UK, government policy advocates breastfeeding as a desirable population norm. Improving breastfeeding initiation and duration is a national health priority area. In recent years breastfeeding initiation has increased in the UK from 76% in 2005 (Scientific Advisory Committee on Nutrition, 2008) to 81% in 2010 (Health and Social Care Information Centre, 2011). However it is acknowledged that following initiation the breastfeeding rate drops significantly in the UK to around 48% at 6-8 weeks and this figure has not significantly changed in recent years (DH, 2011).

A women's decision to breastfeed is acknowledged to be influenced by many factors which include social, psychological, cultural and economic factors (Kong and Lee, 2004, Swanson and Power, 2004). The infant feeding survey (DH, 2002) reports that women are more likely to breastfeed if they are married, educated, above the age of thirty and of higher income. These predictors of breastfeeding initiation are however acknowledged to be non modifiable and therefore are very difficult to change. However, according to Ho and McGrath (2010) the modifiable variables related to

breastfeeding initiation are parental attitudes, experience, confidence and satisfaction. These non demographic variables are believed to be modifiable and therefore more open to intervention. The influence of parental attitudes on early infant feeding was selected for further investigation.

A literature search was completed on Medline and Cinahl identifying research articles with breastfeeding, infant feeding, bottle feeding or artificial feeding and attitud* in their title and abstract. In order to reduce the number of articles obtained the search was limited to articles written in English between the years of 2001-2011. The literature search identified two hundred and forty one articles on Cinahl and three hundred and eighty three articles on Medline (see Appendix 5 for search history). From the combined literature searches ten articles were analysed in depth (see Appendix 6 for literature review table). These articles were selected as they contained the most relevant research about the importance of assessing parental attitudes towards early infant feeding.

All of the literature that was analysed in depth demonstrated that having a positive attitude towards breastfeeding was a significant predictor of breastfeeding initiation (Paine and Dorea, 2001, Gau, 2003, Kong and Lee, 2004, Shaker, Scott and Reid, 2004, Schlickau and Wilson, 2005, Scott, Binns, Oddy and Graham, 2006 Giles, Connor, McClenahan, Mallett Stewart-Knox and Wright, 2007, Sittlington et al., 2007, Mcmillan, Conner, Woolridge, Dyson, Green, Renfrew, Bharj and Clarke, 2008, Dungy et al., 2008.) The research reviewed was all observed to be well designed and robust. Two of the studies examined were felt to be specifically relevant to this research as they investigated parental attitudes towards infant feeding in two areas of the UK known to have low breastfeeding initiation rates (Dungy et al., 2008 and

Sittlington et al., 2007). Both of these studies used the Iowa Infant Feeding Attitude Scale (see Appendix 7) to measure parental attitudes towards feeding. This tool was selected in these studies as it was reported to have a robust internal consistency and in contrast to other measures it was reported to be simple and quick to administer. Using this tool allowed Dungy et al. (2008) and Sittlington et al. (2007) to obtain information from lower socio-economically disadvantaged groups which like Gypsies and Travellers are known to be hard to reach.

A final literature search was completed on Medline and Cinahl identifying research articles with Iowa Infant Feeding Attitude Scale or IIFAS in their title and abstract. No parameters were set for the date however the search was limited to articles written in English. The literature search identified six articles on Cinahl and nine articles on Medline (see Appendix 8 for search history). A further two articles were obtained by searching through the reference lists of selected articles. From the combined literature searches nine articles were analysed in depth (see Appendix 9 for literature review table). The articles excluded from this analysis used the Iowa Infant Feeding Attitude Scale to measure the attitudes of students or health professionals rather than parents towards early infant feeding.

All of the literature examined concluded that the Iowa Infant Feeding Attitude Scale was a reliable and valid tool that demonstrates robust internal consistency (De la Mora, Russell, Dungy, Losch, and Dusdieker, 1999, Shaker, Scott and Reid, 2004, Scott, Binns, Oddy and Graham, 2006, Simmie, 2006, Chambers, McInnes, Hoddinott and Alder, 2007, Sittlington et al., 2007, Dungy et al. 2008, Wallis, Brinzaniuc, Chereches, Oprescu, Sirlincan, David, et al., 2008, Ho and McGrath, 2011.) The study by Chambers et al. (2007) was a systematic review that analysed

the validity of the tools available for assessing parental knowledge, attitudes, confidence and satisfaction towards breastfeeding. Chambers et al. (2007) concluded that only four out of the thirteen tools available had sufficient evidence to support their use. The Iowa Infant Feeding Attitude Scale was one of these four tools. The other eight studies analysed used the Iowa Infant Feeding Attitude Scale in primary research. These studies used the tool in a variety of countries including the United States (De la Mora et al., 1999), Scotland (Dungy et al., 2008, Scott et al., 2006, Shaker et al., 2004), Northern Ireland (Sittlington et al., 2007), England (Simmie, 2006), Romania (Wallis et al., 2008) and Taiwan (Ho and McGrath, 2011.) All of these studies reported that having a positive attitude towards breastfeeding, demonstrated by a high Iowa Infant Feeding Attitude Scale score, was a significant predictor of breastfeeding practice. In addition to this Sittlington et al. (2007) and Dungy et al. (2008) also reported that having a neutral attitude score antenatally implied that a woman's infant feeding intentions were not fixed and that the infant feeding practice of these women may be amenable. They reported that antenatally targeting these women with health promotion interventions aimed at promoting breastfeeding could potentially improve the breastfeeding initiation rate of this group.

This literature review supports using the Iowa Infant Feeding Attitude Scale in research. This tool is therefore used in this research to assess maternal attitudes towards early infant feeding in the local Gypsy and Travelling community.

In summary therefore the literature review has identified a need for this research as it has highlighted the lack of research information available on the infant feeding practice of Gypsy and Traveller women and their attitudes towards breast and formula feeding.

RESEARCH QUESTIONS

Two research questions will be addressed through this research. These are:

- What is the local infant feeding practice amongst Gypsy and Traveller women?
- What are their attitudes towards early infant feeding?

3. METHODOLOGY

The methodology is divided into six sections. These sections are design, instruments, participants, ethics, procedure and data analysis.

3.1. Design

The research questions were investigated using quantitative research methodology. According to Aliaga and Gunderson (2002) quantitative research methodology is described as explaining events through the collection of numerical data which is then interpreted using statistics. This methodology was selected as this research aimed to obtain information that was objective, factual and quantifiable. The main advantages of using this approach is that it is deemed scientific, its analysis is founded on objective laws rather than the values of the researcher and it enables data to be interpreted quickly so large volumes of data can be analysed (Denscombe, 2007). This research methodology was deemed more appropriate than qualitative methodology for this research, as the researcher wanted to obtain factual information from a larger sample of Gypsies and Travellers. This was felt to be important due to the lack of information currently available in research on these topics.

This research used a cross sectional study design. According to Mann (2003), cross sectional studies are primarily used to determine prevalence. Mathers, Fox and Hunn (2007) described cross sectional studies as being non experimental and providing a one off measurement of participants. The advantages of using this design, according to Mann (2003) are that it is quick and cheap to undertake and does not have many ethical considerations compared to other methods, such as randomised control trials,

as it does not withhold treatment or expose individuals to invasive procedures. Its main limitation, according to Mann (2003) is that the results obtained do not clearly differentiate between cause and effect. However, it is accepted that this design is useful in identifying associations between factors. Mann (2003) also acknowledges that cross sectional studies are useful where there is little evidence currently available on a subject as it is a cheap and effective means of exploring hypotheses and generating results on a small scale before establishing whether larger and more expensive research could potentially be undertaken. Using this design was therefore appropriate for this research as no quantitative data was previously available on the infant feeding practices of Gypsies and Travellers or their attitudes towards early infant feeding.

3.2. Instruments

This research used surveys as the data collection technique. According to Mathers et al. (2007) the main advantages of using surveys are that they are flexible, efficient and cost effective and they have external and internal validity. Their potential limitations include factors like reliable results being dependent on good questioning and an appropriate sampling frame and that they have the potential to be influenced by interviewer error or bias.

Two surveys were developed for use in this research. The first survey was a structured questionnaire (see Appendix 10). The questionnaire was structured to ensure that the all the information collected from participants was comparable and to minimise the potential for interviewer error or bias. The purpose of this questionnaire was to establish the sample size and location of local Gypsy and Traveller families

and to identify the community's early infant feeding practice. Data was collected on the community's breastfeeding practice at birth, ten to fourteen days and six to eight weeks. These time frames were specified as local Health Visitors routinely collect infant feeding data on all their families at this time so the data was easily available.

The second survey was also a structured questionnaire (see Appendix 11). The main purpose of this questionnaire was to assess maternal attitudes towards early infant feeding. Mothers were only assessed because within the Gypsy and Travelling community, men and women have distinct familial roles and women are responsible for child rearing (Parry et al., 2004). The questionnaire was also structured to ensure that all the information collected from participants was comparable and to minimise the potential for interviewer error or bias. This questionnaire consisted of the Iowa infant feeding attitude scale, the collection of basic demographic characteristics and the collection of data on the communities past infant feeding practice. The Iowa infant feeding attitude scale was used as the literature review demonstrated that this tool is reliable and valid and effective in obtaining information on attitudes from hard to reach groups (see Section 2.3). Some of the language used in the Iowa infant feeding attitude scale was simplified by the author to make it more easily understood (see Appendix 12 for alterations). The author also developed a visual tool to use with the scale (see Appendix 13 for details). These changes and additions were made because of the known poor literacy levels amongst Gypsies and Travellers (Van Cleemput and Parry, 2001, Van Cleemput, 2000).

Alongside the Iowa infant feeding attitude scale the questionnaire also asked for basic demographic characteristics. These details were requested in order to provide additional information about the sample and to assess whether there were any

associations between Iowa infant feeding attitude scores and demographic variables. The demographic characteristics collected were similar categories to those used in research by Dungy et al. (2008) and Sittlington et al. (2007). However, details on employment and economic status were not included, as in research by Peters et al. (2009) Gypsy and Traveller advisors warned against asking information about wealth or occupation as this information would be viewed by the community as unduly sensitive. The questionnaire did however ask specifically about a mother's ability to read health literature. The author felt this question was pertinent, based on personal experience, as it would provide useful information on education without being deemed as unduly sensitive by the community.

The questionnaire also collected information on the communities past infant feeding practice. This information was collected so that the research could compare the Iowa infant feeding attitude scores to past infant feeding practice. This was in order to ascertain whether maternal attitudes were a significant predictor of early infant feeding choices.

In November 2010 the completed questionnaire was shown to three women from the Gypsy and Traveller community with children under five years old and one agency that regularly works with the Irish Travelling community. This was to ensure that the questions asked were deemed culturally appropriate and would not cause offence to participants. This was important as according to Ensign (2003) close working and liaising with hard to reach communities is essential when undertaking research involving them. Positive feedback was reported by those consulted. One family however emphasised the importance of researchers not asking the second questionnaire if a male from the Gypsy or Travelling community was present. This

advice was followed by Health Visitors during data collection. The researcher ensured this advice was also specified in the Health Visitor information sheet (see Appendix 14.)

3.3. Participants

This research identified Western Cheshire Primary Care Trust as its catchment area. This Trust was selected as the author is employed by the Trust and has knowledge of and access to the local Gypsy and Traveller community. This local knowledge was essential as Gypsies and Travellers are known to be a hard to reach group (Parry et al., 2004). Western Cheshire Primary Care Trust was also selected as the author works alongside and attends meetings with all of the Health Visitors employed by the Trust. This was important as the author needed their co-operation in order to achieve an accurate sample for this research.

The first questionnaire was sent to all Health Visitors employed by Western Cheshire Community Care. In March 2011 this was fifty three Health Visitors. Health Visitors were selected to complete the first questionnaire as they universally visit all families with children under five years old and they also routinely collect information on the early infant feeding practice of these families.

The second questionnaire was administered by convenience sampling. Denscombe (2007) acknowledges that convenience sampling should be used with caution in research as it offers no justification for the inclusion of people in the sample and it can also be seen as a “lazy” approach to research. It was however not possible for this research to use quota sampling as there is no demographic information available

on the local Gypsy and Traveller community. This meant that that the author was unable to use these details to ensure that the sample was representative of the local Gypsy and Traveller community. Convenience sampling was therefore used despite its limitations as the author acknowledged that administering the questionnaire on the total population of local Gypsies and Travellers meeting the inclusion criteria was unrealistic in the time frame given for this research. The sample was however not “hand-picked” by Health Visitors but Health Visitors were advised to discuss the questionnaire during routine home visits that they were completing as part of their normal practice. Additional visiting to undertake this research was not requested by the author as it was acknowledged that Health Visitors would not have the time or capacity to undertake non routine visits. The author also felt based on personal experience that the Gypsy and Travelling community would also be less receptive to receiving additional appointments for the purpose of undertaking this research. Data was collected by Health Visitors between the period of March 2011 and August 2011.

Gypsy and Traveller women that met the inclusion criteria were identified by their Health Visitor. Local Health Visitors were used to identify families meeting the inclusion criteria as detecting the actual number of Gypsies and Travellers resident in Western Cheshire Primary Care Trust by other means at any one time is problematic. This is due to Gypsies and Travellers being a transient community, whose ethnicity is currently not identifiable though census data or other routinely collected data sources (South West Public Health Observatory, 2002).

The inclusion criteria used is presented in Table 1.

Table 1. Table to show the inclusion criteria

1	Women that are members of the Gypsy or Traveller community
2	Women with children under the age of three years old
3	Women with children permanently registered with a General Practitioner in Western Cheshire Primary Care Trust.

Points one and two of the inclusion criteria were judged to be necessary to ensure that the information collected was relevant and involved women who had had children relatively recently. Point three was included as local Health Visitors are not routinely informed about families resident in Western Cheshire Primary Care Trust with a temporary General Practitioner or no General Practitioner. These families were therefore excluded as Health Visitors would not be able to accurately report on the number of families present within Western Cheshire Primary Care Trust at any one point in time.

3.4. Ethics

This study has received ethical approval from three separate Research Ethics Committees. In December 2010 it received ethical approval from the Faculty of Health and Social Care at the University of Chester. Following approval from the University an Integrated Research Application System (IRAS) form was completed. The research was then presented to the North West Research Ethics Committee at Alder Hey Hospital in January 2011. Following this presentation some minor adjustments were required to the Participant Information Sheet and Consent form. The author was also advised to provide an information sheet for Health Visitors administering the second questionnaire. Following these alterations the research

received ethical approval from the North West Ethics Committee in February 2011. After receiving this ethical approval Western Cheshire Primary Care Trusts Ethics Committee also granted the research ethical approval in February 2011.

3.5. Procedure

Before commencing data collection the research proposal was presented to the local Health Visitors at their monthly professional meeting in March 2011. The purpose of this was to optimise Health Visiting co-operation and interest. The Health Visitor manager then provided a list of all the local Health Visitor names and email addresses. The first questionnaire was then sent out by email to all Health Visitors in March 2011. An explanatory email accompanied the questionnaire to ensure that local Health Visitors understood why their information was being requested, knew how to complete the questionnaire and who to contact if they were having difficulties (see Appendix 15 for details). Replies were received electronically through survey monkey (www.surveymonkey.com) which was the data collection tool recommended by the research department at Western Cheshire Primary Care Trust.

The second questionnaire was administered by Health Visitors with Gypsies and Travellers on their caseloads that met the inclusion criteria. Using a known practitioner was essential as Gypsies and Travellers have a general mistrust of non-Gypsies or Travellers and may be sensitive to intrusion and reluctant to give information to someone that they are unfamiliar with (Fitzpatrick, Molloy and Johnson, 1997 and Parry et al., 2004). It was therefore hoped that using a known professional would increase the numbers of Gypsies and Travellers willing to participate in the research and therefore increase its validity. An information sheet

was produced and given to all local Health Visitors prior to them administering the second questionnaire (see Appendix 14 for details). This was in order to give local Health Visitors clear instructions on administering the questionnaire and to limit any potential problems caused by the research being undertaken by more than one researcher.

The second questionnaire was administered by face to face interview in the family's home. Face to face interviewing was required because of the known poor literacy levels amongst Gypsies and Travellers (Van Cleemput and Parry, 2001, Van Cleemput, 2000). Denscombe (2007) acknowledges that the main advantages of face to face interviewing are that researchers tend to get a better response rate from participants and will often obtain richer and more detailed data. The main limitation reported is related to cost in particular due to interviewer time and travel. The cost implications of undertaking this research were reduced as Health Visitors were only asked to undertake this research during routine home visits that they were completing as part of their normal practice. Therefore there were no travel costs attached and time implications were minimised. Due to these visits taking place in the home environment, Health Visitors were advised to follow Western Cheshire Primary Care Trust's lone worker policy (NHS Western Cheshire, 2006) when undertaking this research.

Health Visitors were provided with Participant Information sheets and Consent forms to discuss and give to families (see Appendix 16 for details). They were specifically advised to ensure families were aware that refusing to undertake the research would not affect their relationship with their Health Visitor. This was important ethically to ensure that participants did not feel coerced or pressurised into undertaking the

research. Written consent was also obtained from all participants. A routine delayed response to participation was not deemed appropriate due to the questionnaire only taking about five minutes to complete and there being no perceived risks to participating.

After completion the family Health Visitor returned the consent form and the questionnaire to the author by post. They were then stored securely on National Health Service premises in a locked room in a locked cabinet. The signed consent forms were stored separately from the completed questionnaires so that even prior to data analysis the completed questionnaires were made anonymous. This was important in order to ensure that confidentiality (DH, 2003c) and data protection (Office of Public Sector Information, 1998) rules were adhered to.

3.6. Data Analysis

The data collected was analysed using Predictive Analytics Software Version 18. Descriptive statistics were used to analyse all the data obtained from the first questionnaire. A combination of descriptive statistics and statistical tests were used to examine the information collected from the second questionnaire. The two statistical tests implemented were the One-way ANOVA and the Kruskal- Wallis test. The Kruskal-Wallis test was used when the One-way ANOVA could not be used. These statistical tests were selected following the advice of Mike Morris, statistician, from the University of Chester. The statistical tests were used to ascertain whether a significant difference was shown between the total attitude scores and the previous infant feeding practice and the total attitude scores and the extraneous demographic variables.

4. RESULTS

The results of the first and second questionnaire have been analysed separately. The results of the first questionnaire are initially analysed. The first questionnaire provides information on the size and location of the local Gypsy and Travelling community and the local community's early infant feeding practice.

4.1. First Questionnaire

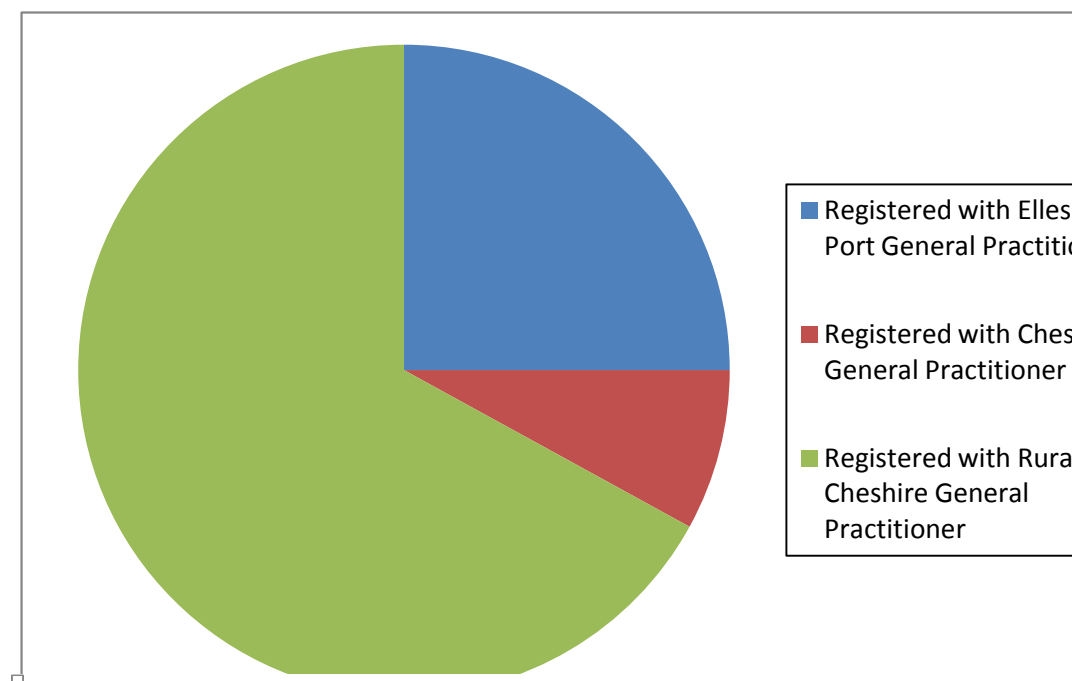
4.1.1. Response Rate

The first questionnaire was completed by all Health Visitors employed by Western Cheshire Community Care. A response rate of 100% was obtained. A response rate of 100% was necessary in order for an accurate sample size for the local Gypsy and Travelling community to be established.

4.1.2. Size and Location of the Gypsy and Traveller Community

Health Visitors were asked to identify the number of Gypsy and Traveller families and children they had registered on their caseloads with children born between the 1st September 2006 and 1st March 2011. Fifty two families and seventy five children were identified. This questionnaire also showed that out of the fifty three Health Visitors surveyed only twelve Health Visitors had Gypsy and Traveller families on their caseloads. This demonstrates that the Gypsy and Travelling community are not equally dispersed throughout Western Cheshire Primary Care Trust but are predominantly located in certain areas. The pie chart presented in Figure 1 shows the geographical location of the Gypsy and Traveller families according to General Practitioner practice.

Figure 1. Pie chart to show the Geographical Location of Gypsy and Traveller Families in Western Cheshire Primary Care Trust

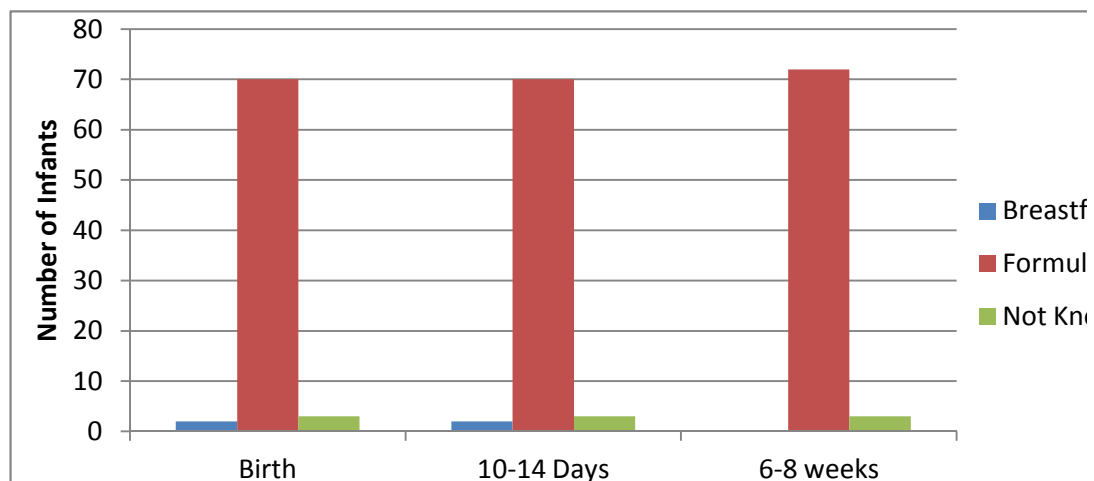


The results showed that 8% of families and 7% of children were located on Health Visitor caseloads attached to General Practitioners based in Chester, 25% of families and 24% of children were located on Health Visitor caseloads attached to General Practitioners based in Ellesmere Port and 67% of families and 69% of children were located on Health Visitor caseloads attached to General Practitioners based in Rural Cheshire. The results also demonstrated that one Health Visitor in Rural Cheshire had considerably more Gypsies and Travellers located on their caseload than any other Health Visitor. This caseload alone contained 54% of all Gypsy and Traveller families and 57% of all Gypsy and Traveller children. In comparison to this the next highest caseload count was a caseload located in Ellesmere Port that had 8% of families and 7% of children.

4.1.3. Early Infant feeding Practice of the Gypsy and Travelling Community

Health Visitors were then asked to identify the early infant feeding practice of the Gypsy and Traveller families on their caseloads. They were asked to provide information on the number of children that were breastfed at birth, at ten to fourteen days and at six to eight weeks. The results are displayed in the bar chart presented in Figure 2.

Figure 2. Bar chart to show the early infant feeding practice of Gypsy and Traveller women in Western Cheshire Primary Care Trust at birth, ten to fourteen days and six to eight weeks.



The bar chart shows that two children from the Gypsy and Traveller community were breastfed at birth, seventy children were formula fed and the feeding practice of three children was unknown. At ten to fourteen days the infant feeding practice remained the same as at birth. At six to eight weeks however the chart demonstrated that no children from the Gypsy and Traveller community were breastfed, seventy two children were formula fed and the feeding practice of three children was unknown.

According to these statistics the breastfeeding rate amongst Gypsies and Travellers registered permanently with a General Practitioner in Western Cheshire Primary Care Trust is 2.7% at birth, 2.7% at ten to fourteen days and 0% at six to eight weeks.

4.2. Second Questionnaire

The results of the second questionnaire are now analysed. This questionnaire provides information on the demographic characteristics of the sample, their past infant feeding practice and their attitude towards breast and formula feeding.

4.2.1. Identifying the Sample for the Second Questionnaire

Health Visitors identified as having Gypsies and Travellers on their caseload were contacted by telephone and were asked to confirm the number of Gypsy and Traveller families that they had on their caseload with children under the age of three years old. All Health Visitors contacted replied. A response rate of 100% was therefore obtained. In March 2011 the total population of Gypsy and Traveller families permanently registered with a General Practitioner within Western Cheshire Primary Care Trust with children under the age of three was forty families.

4.2.2. Sample Size

The second questionnaire was completed by twenty families from the Gypsy and Traveller community between the months of March and August 2011. This therefore indicates that approximately 50% of Gypsy and Traveller families which met the inclusion criteria completed the questionnaire. A precise sample size cannot be given however as some of the families sampled had children after March 2011. Only one

family out of the twenty one families approached refused to participate in the research. Therefore this questionnaire obtained a 95% uptake rate.

4.2.3. Basic Demographic Information

This questionnaire collected basic demographic information on the sample. This included information on:

- Age
- Marital Status
- Ethnic Group
- Type of Accommodation
- Travelling Patterns
- Number of children
- Age of youngest child
- Ability to read health literature

The information collected on these topics is explored in the sections below.

4.2.3.1. Age

Table 2 shows the age range of the sample. The age ranged between the categories of fifteen to twenty years old and thirty six to forty years old. 60% of participants were aged between twenty one and thirty years old. The mean age category was twenty one to twenty five years old. The median age category was twenty six to thirty years old.

Table 2. Table to show the age range of the sample

Age	Frequency	Percentage	Cumulative Percentage
15-20 years	3	15.0	15.0
21-25 years	6	30.0	45.0
26-30 years	6	30.0	75.0
31-35 years	4	20.0	95.0
36-40 years	1	5.0	100.0
Total	20	100.0	

4.2.3.2. Marital Status

Table 3 shows the marital status of the sample. The research found that 60% of the sample was married, 35% of the sample was single and 5% of the sample was divorced.

Table 3. Table to show the marital status of the sample

Marital Status	Frequency	Percentage	Cumulative Percentage
Married	12	60.0	60.0
Single	7	35.0	95.0
Divorced	1	5.0	100.0
Total	20	100.0	

4.2.3.3. Ethnic Group

Table 4 shows the ethnic composition of the sample. 75% of the sample was Romany Gypsy and 25% of the sample was Irish Traveller.

Table 4. Table to show the ethnic composition of the sample.

Ethnic Composition	Frequency	Percentage	Cumulative Percentage
Romany Gypsy	15	75.0	75.0
Irish Traveller	5	25.0	100.0
Total	20	100.0	

4.2.3.4. Type of Accommodation

Table 5 shows the type of accommodation that the sample lived in. 80% lived in a trailer (or caravan), 10% lived in a house, 5% lived in a chalet and 5% indicated other. The family that stated other reported that they lived part of the year in a trailer and part of the year in a house.

Table 5. Table to show the type of accommodation that the sample lived in

Accommodation	Frequency	Percentage	Cumulative Percentage
House	2	10.0	10.0
Trailer	16	80.0	90.0
Chalet	1	5.0	95.0
Other	1	5.0	100.0
Total	20	100.0	

4.2.3.5. Travelling Patterns

Table 6 shows the travelling patterns of the sample. 85% of the sample travelled at least once a year. From this figure 65% of the sample travelled either once a year or several times a year and 20% of the sample travelled often. Only 15% of the sample reported that they remained at a fixed location throughout the year.

Table 6. Table to show the travelling patterns of the sample

How often do you travel?	Frequency	Percentage	Cumulative Percentage
Never	3	15.0	15.0
once a year	6	30.0	45.0
several times a year	7	35.0	80.0
Often	4	20.0	100.0
Total	20	100.0	

4.2.3.6. Number of Children

Table 7 shows the number of children the sample had. The range was that families had between one and five children. The mean, median and mode were that families had two children. 60% of the sample had one or two children and 40% of the sample had three or more children. 10% of the sample had five children.

Table 7. Table to show the number of children the sample had

Number of children	Frequency	Percentage	Cumulative Percentage
1	4	20.0	20.0
2	8	40.0	60.0
3	4	20.0	80.0
4	2	10.0	90.0
5	2	10.0	100.0
Total	20	100.0	

4.2.3.7. Age of Youngest Child

Table 8 shows the age of the sample's youngest child. All of those sampled had children aged less than two years old. The range was between two weeks old to two years old. 40% of the samples youngest child was under six months old. The mean

and mode were that their youngest child was less than six months old. The median was that their youngest child was between six and twelve months old.

Table 8. Table to show the age of the sample's youngest child

Age of Youngest Child	Frequency	Percentage	Cumulative Percentage
Under 6 months	8	40.0	40.0
6-12 months	5	25.0	65.0
13-24 months	7	35.0	100.0
Total	20	100.0	

4.2.3.8. Ability to Read Health Literature

Table 9 shows that 55% of the sample had difficulty reading health literature and 45% reported that they were able to read health literature without difficulty.

Table 9. Table to show whether the sample had difficulty reading health literature

Difficulty reading Health Literature	Frequency	Percentage	Cumulative Percentage
Yes	11	55.0	55.0
No	9	45.0	100.0
Total	20	100.0	

4.2.4. Infant feeding choices

This questionnaire also collected basic information about the infant feeding choices of the sample. It asked two questions which were:

- How did you feed your youngest child at birth?
- Have you ever breastfed?

The information is presented in the following sections.

4.2.4.1. How did you feed your youngest child at birth?

Table 10 shows that 90% of the sample chose to formula feed their youngest child and 10% chose to breastfeed.

Table 10. Table to show how the sample fed their youngest child

Choice of feeding method	Frequency	Percentage	Cumulative Percentage
Formula	18	90.0	90.0
Breast	2	10.0	100.0
Total	20	100.0	

4.2.4.2. Have you ever Breastfed?

Table 11 shows that 15% of the sample had previously breastfed a child and 85% of the sample had never tried breastfeeding.

Table 11. Table to show whether the sample had ever breastfed

Have you ever Breastfed?	Frequency	Percentage	Cumulative Percentage
Yes	3	15.0	15.0
No	17	85.0	100.0
Total	20	100.0	

4.2.5. Attitudes towards early infant feeding

The Iowa infant feeding attitude scale was completed by all participants as part of the second questionnaire. This scale consists of seventeen statements. Participants were asked to decide whether they strongly disagreed (scored one), disagreed (scored two), were neutral (scored three), agreed (scored four) or strongly agreed

(scored five) to each of the statements. The sample's responses for each of the seventeen statements are presented below.

Statement One- The dietary benefits of breastfeeding only last while the baby is having breast milk.

Table 12 shows that 45% of the sample had a neutral response to statement one. 30% either disagreed or strongly disagreed with it and 20% either agreed or strongly agreed with it. The median and mode were both 3 which indicates that in general the sample gave a neutral response to statement one. The mean was 2.8 which would also indicate a neutral to slightly negative response. The standard deviation was 1.281.

Table 12. Table to show the responses to Statement One

Answers to Question 1	Frequency	Percentage
Strongly Disagree	5	25.0
Disagree	1	5.0
Neutral	9	45.0
Agree	3	15.0
Strongly Agree	2	10.0
Total	20	100.0

Mean	2.80
Median	3.00
Mode	3
Std. Deviation	1.281

Statement Two- Bottle feeding is easier than breastfeeding

Table 13 shows that 65% of the sample agreed or strongly agreed to statement two. 30% were neutral towards it and 5% strongly disagreed with it. The mean was 4.1 and median and mode were 5. These scores indicate that in general the sample strongly agreed or agreed with statement two. The standard deviation was 1.165.

Table 13. Table to show the responses to Statement Two

Answers to Question 2	Frequency	Percentage
Strongly Disagree	1	5.0
Neutral	6	30.0
Agree	2	10.0
Strongly Agree	11	55.0
Total	20	100.0

Mean	4.10
Median	5.00
Mode	5
Std. Deviation	1.165

Statement Three- Breastfeeding improves the relationship between mother and baby

Table 14 shows that 60% of the sample either agreed or strongly agreed with statement three. 25% had a neutral response towards it and 15% strongly disagreed with it. The mean was 3.7 which suggests in general a neutral or slightly positive response. The median was 4 and mode was 5 which both indicate that the sample generally agrees or strongly agrees to statement three. The standard deviation was 1.418.

Table 14. Table to show the responses to Statement Three

Answers to Question 3	Frequency	Percentage
Strongly Disagree	3	15.0
Neutral	5	25.0
Agree	4	20.0
Strongly Agree	8	40.0
Total	20	100.0

Mean	3.70
Median	4.00
Mode	5
Std. Deviation	1.418

Statement Four- Breast milk is lacking in iron

Table 15 shows that 55% of the sample had a neutral response to statement four. 40% either disagreed or strongly disagreed with it and 5% strongly agreed with it. The mode and median were both 3 which indicates a neutral response. The mean

was 2.35 which indicates that the sample disagrees with statement four. The standard deviation was 1.137.

Table 15. Table to show the responses to Statement Four

Answers to Question 4	Frequency	Percentage
Strongly Disagree	7	35.0
Disagree	1	5.0
Neutral	11	55.0
Strongly Agree	1	5.0
Total	20	100.0

Mean	2.35
Median	3.00
Mode	3
Std. Deviation	1.137

Statement Five- Bottle fed babies are more likely to be overfed than breastfed babies

Table 16 shows that 40% of the sample either disagreed or strongly disagreed with statement five. 25% had a neutral response towards it and 35% agreed or strongly agreed with it. The mean was 2.85. This indicates a slightly negative response towards this statement. However the median was 3 which indicates a neutral response. The mode was both 1 and 3 which indicate both strong disagreement and neutral response towards statement five. The standard deviation was 1.424.

Table 16. Table to show the responses to Statement Five

Answers to Question 5	Frequency	Percentage
Strongly Disagree	5	25.0
Disagree	3	15.0
Neutral	5	25.0
Agree	4	20.0
Strongly Agree	3	15.0
Total	20	100.0

Mean	2.85
Median	3.00
Mode	1 and 3
Std. Deviation	1.424

Statement Six- Bottle feeding is a better choice if a mother plans to work outside the home

Table 17 shows that 90% of the sample either agreed or strongly agreed with statement six. 5% had a neutral response towards it and 5% disagreed with it. The median and mode were 5 and the mean was 4.45. These scores indicate that in general that the sample strongly agreed with statement six. The standard deviation was 0.826.

Table 17. Table to show the responses to Statement Six

Answers to Question 6	Frequency	Percentage
Disagree	1	5.0
Neutral	1	5.0
Agree	6	30.0
Strongly Agree	12	60.0
Total	20	100.0

Mean	4.45
Median	5.00
Mode	5
Std. Deviation	.826

Statement Seven- Mothers who bottle feed miss out on one of the great joys of motherhood

Table 18 shows that 70% of the sample strongly disagreed with statement seven. 10% had a neutral response towards it and 20% either agreed or strongly agreed with it. The median and mode were 1 and the mean was 1.9. All these scores indicate that in general the sample strongly disagreed with statement seven. The standard deviation was 1.483.

Table 18. Table to show the responses to Statement Seven

Answers to Question 7	Frequency	Percentage
Strongly Disagree	14	70.0
Neutral	2	10.0
Agree	2	10.0
Strongly Agree	2	10.0
Total	20	100.0

Mean	1.90
Median	1.00
Mode	1
Std. Deviation	1.483

Statement Eight- Women should not breastfeed in public places such as restaurants

Table 19 shows that 65% of the sample agreed or strongly agreed with statement eight. 10% had a neutral response towards it and 25% strongly disagreed with it. The mode and median were both 5. This indicates that in general the sample strongly agreed with statement eight. The mean was however 3.75 which indicates a neutral to positive response. The standard deviation was 1.743.

Table 19. Table to show the responses to Statement Eight

Answers to Question 8	Frequency	Percentage
Strongly Disagree	5	25.0
Neutral	2	10.0
Agree	1	5.0
Strongly Agree	12	60.0
Total	20	100.0

Mean	3.75
Median	5.00
Mode	5
Std. Deviation	1.743

Statement Nine- Breastfed babies are healthier than bottle fed babies

Table 20 shows that 45% of the sample had a neutral response to statement nine. 30% either disagreed or strongly disagreed with it and 20% either agreed or strongly

agreed with it. The mean, median and mode were all 3 which indicate a neutral response towards statement nine. The standard deviation was 1.026.

Table 20. Table to show the responses to Statement Nine

Answers to Question 9	Frequency	Percentage
Strongly Disagree	1	5.0
Disagree	5	25.0
Neutral	9	45.0
Agree	3	15.0
Strongly Agree	2	10.0
Total	20	100.0

Mean	3.00
Median	3.00
Mode	3
Std. Deviation	1.026

Statement Ten- Breastfed babies are more likely to be overfed than bottle fed babies

Table 21 shows that 75% of the sample either disagreed or strongly disagreed with statement ten. 15% had a neutral response towards it and 10% either agreed or strongly agreed with it. The mean and median were both 2 which indicates that in general the sample disagreed with statement ten. The mode was 1 which indicates a strong disagreement to it. The standard deviation was 1.124.

Table 21. Table to show the responses to Statement Ten

Answers to Question 10	Frequency	Percentage
Strongly Disagree	8	40.0
Disagree	7	35.0
Neutral	3	15.0
Agree	1	5.0
Strongly Agree	1	5.0
Total	20	100.0

Mean	2.00
Median	2.00
Mode	1
Std. Deviation	1.124

Statement Eleven- Fathers feel left out if a mother breastfeeds

Table 22 shows that 45% of the sample disagreed or strongly disagreed with statement eleven. 40% had a neutral response towards it and 15% either agreed or strongly agreed with it. The mean was 2.4 which indicates slight disagreement to it. The median was 3 which indicates a neutral response. The mode was 1 and 3. This indicates both strong disagreement and a neutral response. The standard deviation was 1.353.

Table 22. Table to show the responses to Statement Eleven

Answers to Question 11	Frequency	Percentage
Strongly Disagree	8	40.0
Disagree	1	5.0
Neutral	8	40.0
Agree	1	5.0
Strongly Agree	2	10.0
Total	20	100.0

Mean	2.40
Median	3.00
Mode	1 and 3
Std. Deviation	1.353

Statement Twelve- Breast milk is the perfect milk for babies

Table 23 shows that 55% of the sample either agreed or strongly agreed with statement twelve. 20% had a neutral response towards it and 25% strongly disagreed with it. The mean was 3.5 which indicates a neutral response. The median was 4 which indicates agreement to it and the mode was 5 which indicates strong agreement to it. The standard deviation was 1.67.

Table 23. Table to show the responses to Statement Twelve

Answers to Question 12	Frequency	Percentage
Strongly Disagree	5	25.0
Neutral	4	20.0
Agree	2	10.0
Strongly Agree	9	45.0
Total	20	100.0

Mean	3.50
Median	4.00
Mode	5
Std. Deviation	1.670

Statement Thirteen- Breast milk is more easily digested than bottle milk

Table 24 shows that 50% of the sample had a neutral response towards statement thirteen. 50% also either agreed or strongly agreed with it. The mode was 3, the median was 3.5 and the mean was 3.9. This indicates that in general the sample had a neutral to slightly positive response to statement thirteen. The standard deviation was 0.968.

Table 24. Table to show the responses to Statement Thirteen

Answers to Question 13	Frequency	Percentage
Neutral	10	50.0
Agree	2	10.0
Strongly Agree	8	40.0
Total	20	100.0

Mean	3.90
Median	3.50
Mode	3
Std. Deviation	.968

Statement Fourteen- Bottle milk is as healthy for a baby as breast milk

Table 25 shows that 45% of the sample agree or strongly agree with statement fourteen. 45% disagree or strongly disagree with it and 10% were neutral towards it. The median was 3 and the mean was 2.95. These scores both indicate that in

general the sample gave a neutral response to statement fourteen. The mode was 4 which indicates some agreement towards it. The standard deviation was 1.317.

Table 25. Table to show the responses to Statement Fourteen

Answer to Question 14	Frequency	Percentage
Strongly Disagree	3	15.0
Disagree	6	30.0
Neutral	2	10.0
Agree	7	35.0
Strongly Agree	2	10.0
Total	20	100.0

Mean	2.95
Median	3.00
Mode	4
Std. Deviation	1.317

Statement Fifteen- Breastfeeding is easier than bottle feeding

Table 26 shows that 60% of the sample either disagreed or strongly disagreed with statement fifteen. 35% had a neutral response towards it and 5% agreed with it. The mean was 2.05 and the median was 2 which indicate disagreement towards statement fifteen. The mode was one which indicates strong disagreement to it. The standard deviation was 0.999.

Table 26. Table to show the responses to Statement Fifteen

Answers to Question 15	Frequency	Percentage
Strongly Disagree	8	40.0
Disagree	4	20.0
Neutral	7	35.0
Agree	1	5.0
Total	20	100.0

Mean	2.05
Median	2.00
Mode	1
Std. Deviation	.999

Statement Sixteen- Breastfeeding is cheaper than bottle feeding

Table 27 shows that 90% of the sample either agreed or strongly agreed with statement sixteen. 10% had a neutral response towards it. The median and mode were 5 and the mean was 4.7. These all indicate strong agreement with statement sixteen. The standard deviation was 0.657.

Table 27. Table to show the responses to Statement Sixteen

Answers to Question 16	Frequency	Percentage
Neutral	2	10.0
Agree	2	10.0
Strongly Agree	16	80.0
Total	20	100.0

Mean	4.70
Median	5.00
Mode	5
Std. Deviation	.657

Statement Seventeen- A mother who occasionally drinks alcohol should not breastfeed her baby

Table 28 shows that 85% of the sample either agreed or strongly agreed with statement seventeen. 10% had a neutral response towards it and 5% disagreed with it. The median and mode were 5 and the mean was 4.55 which all indicate strong agreement with statement seventeen. The standard deviation was 0.887.

Table 28. Table to show the responses to Statement Seventeen

Answers to Question 17	Frequency	Percentage
Disagree	1	5.0
Neutral	2	10.0
Agree	2	10.0
Strongly Agree	15	75.0
Total	20	100.0

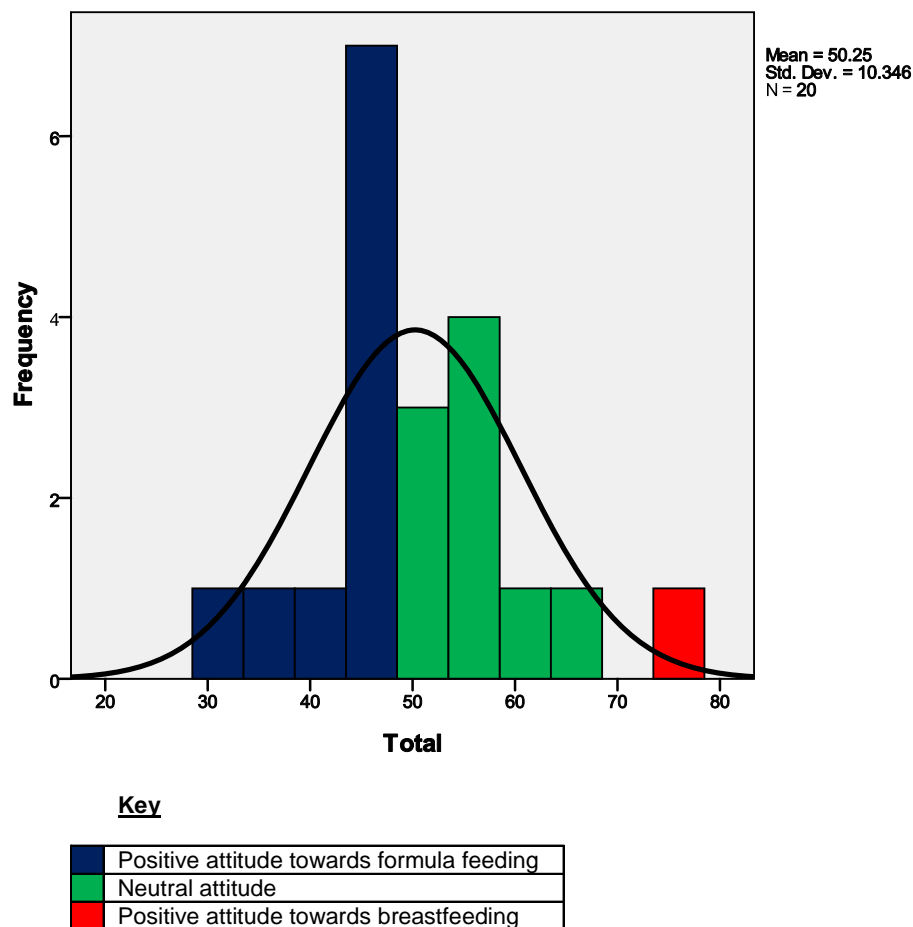
Mean	4.55
Median	5.00
Mode	5
Std. Deviation	.887

4.2.5.1 Total Attitude Score

The Iowa infant feeding attitude scale was completed by all participants. This scale was then scored to ascertain each participant's total attitude score. Some statements required reverse marking. According to De la Mora et al. (1999) the total attitude score can range between seventeen and eighty five. A score of between seventeen and forty eight indicates a positive attitude towards formula feeding. A score of between forty nine and sixty nine indicates a neutral attitude. A score of between seventy and eighty five indicates a positive attitude towards breastfeeding.

The histogram in Figure 3 shows the total attitude scores of the sample. The results ranged from an attitude score of thirty one to seventy six. The blue bars on the histogram indicate a positive attitude towards formula feeding, the green bars indicate a neutral attitude towards early infant feeding and the red bars indicate a positive attitude towards breastfeeding. 50% of the sample had a positive attitude towards formula feeding. 45% of the sample had a neutral attitude towards early infant feeding and 5% of the sample had a positive attitude towards breastfeeding. The mean score was 50 which indicates that overall the sample's mean shows a neutral attitude towards early infant feeding. The median score was 48 which demonstrates that overall the sample's median indicated a positive attitude towards formula feeding. The standard deviation was 10.34.

Figure 3. Histogram to show the total attitude scores of the sample



4.2.6. Significance

The total attitude scores were then analysed using statistical tests. Two statistical tests were used, which were the One-way ANOVA and the Kruskal- Wallis test. The Kruskal- Wallis test was used when the One-way ANOVA could not be used. Initially the total attitude scores were tested for significance against the sample's early infant feeding practice. The results are presented in Table 29.

Table 29. Table to show whether the total attitude score were found to be significant when compared to the samples early infant feeding practice

Early Infant Feeding Practice	Statistical Test Implemented	P Value	Significance
How did you feed your youngest child at birth?	Kruskal- Wallis	0.077	Not Significant
Have you ever breastfed?	Kruskal- Wallis	0.013	Significant

These results showed that there was no significant difference when the total attitude scores of women that chose to formula feed their youngest child were compared to the total attitude scores of women who chose to breastfeed their youngest child. This was demonstrated as the p value is 0.077. The p value needs to be below 0.05 to show significance (Morris, 2009a).

However a significant difference was shown when the total attitude scores of women that had previously breastfed were compared to the total attitude scores of women that had never breastfed. A significant difference is shown as the p value is 0.013 which is less than 0.05 (Morris, 2009a).

Following this the total attitude scores were also tested for significance against extraneous demographic variables. The results are presented in Table 30.

Table 30. Table to show whether the total attitude score were found to be significant when compared to the samples extraneous demographic characteristics

Demographic Variables	Statistical Test Implemented	P Value	Significance
Age	Kruskal- Wallis	0.924	Not Significant
Marital Status	One way ANOVA	0.378	Not Significant
Ethnic Group	One way ANOVA	0.839	Not Significant
Type of Accommodation	Kruskal- Wallis	0.413	Not Significant
Travelling Patterns	Kruskal- Wallis	0.692	Not Significant
Number of Children	Kruskal- Wallis	0.544	Not Significant
Age of Youngest Child	One way ANOVA	0.186	Not Significant
Ability to read Health Literature	One way ANOVA	0.102	Not Significant

The results showed that no significant difference was found between groups when the total Iowa infant feeding attitude scores was compared to any of the extraneous demographic variables. This is demonstrated as all of the p values in Table 30 are greater than 0.05 (Morris 2009a, Morris 2009b).

5. DISCUSSION

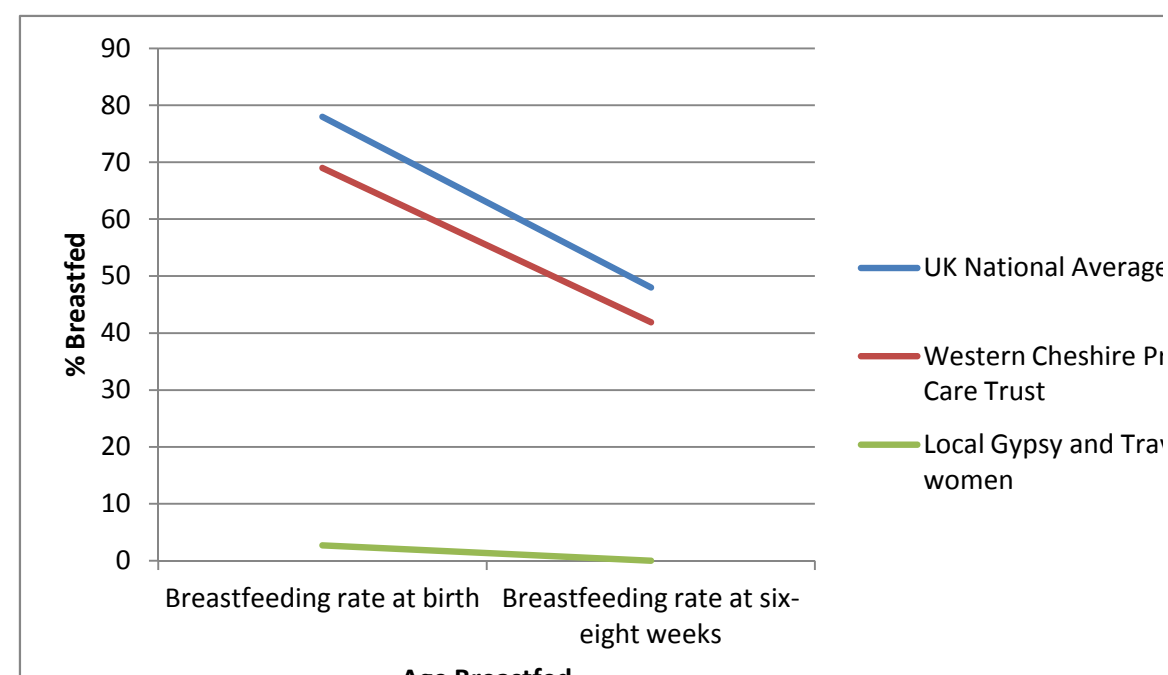
This research aimed to answer two research questions. These research questions were what is the local infant feeding practice amongst Gypsy and Traveller women? and what are their attitudes towards early infant feeding? The results generated will be discussed under these headings. Following this the author will then reflect on the research methodology used discussing the advantages and limitations of methods employed.

5.1. What is the local infant feeding practice amongst Gypsy and Traveller women?

The results of this research showed that over 93% of Gypsy and Traveller women in Western Cheshire Primary Care Trust chose to formula feed their infants and the current breastfeeding rate in this community is very low. It established that the breastfeeding rate amongst Gypsy and Traveller women in Western Cheshire Primary Care Trust was 2.7% at birth and 0% at six to eight weeks. These figures are significantly lower than the national average for the UK. In the UK in 2005 the breastfeeding rate was 78% at birth and 48% at six to eight weeks (Scientific Advisory Committee on Nutrition, 2008). These figures can also be compared to local breastfeeding practice within Western Cheshire Primary Care Trust. Western Cheshire Primary Care Trust reported that in 2009/2010 the breastfeeding rate was 69% at birth and 41.9% at six to eight weeks (NHS Western Cheshire, 2011). These figures are lower locally than the national average for the UK but they remain

significantly higher than the breastfeeding rate of local Gypsy and Traveller families. These comparisons are presented pictorially in the chart in Figure 4.

Figure 4. Chart to show the breastfeeding initiation rate of local Gypsy and Traveller women compared to the UK national average and the average for Western Cheshire Primary Care Trust.



This research has demonstrated that in Western Cheshire Primary Care Trust very few women from the Gypsy and Traveller community breastfeed. This is important as the Department of Health (2009) acknowledges that choosing to breastfeed is known to play an important role in improving maternal and child health and in reducing health inequalities. Research by Parry et al. (2004) highlighted that Gypsies and Travellers have poorer health and significantly more self reported symptoms of ill health compared to average UK residents, English speaking ethnic minority groups and socio-economically disadvantaged White UK residents. Establishing that there is a very low breastfeeding rate in this community is significant as the Department of

Health (2009) suggests that improving the community's breastfeeding initiation rate would help improve the community's overall health and assist in tackling the known health inequalities.

It is acknowledged that a woman's decision to breastfeed is influenced by many factors (Kong and Lee, 2004, Swanson and Power, 2004). Most of these factors are however acknowledged to be non modifiable and therefore very difficult to change. The modifiable factors associated with breastfeeding initiation are parental attitudes, experience, confidence and satisfaction (Ho and McGrath, 2010). The second research question investigated the local Gypsy and Traveller community's attitudes towards early infant feeding. This was investigated in order to establish their current attitude towards early infant feeding and to ascertain whether this was an area that could potentially be targeted by public health initiatives to increase breastfeeding initiation rates.

5.2. What are the attitudes of Gypsy and Traveller women towards early infant feeding?

The results of this research are inconclusive in that, it could be argued that the results show that Gypsy and Traveller women have a negative attitude towards breastfeeding and a more positive attitude towards formula feeding. This is demonstrated as 50% of the sample showed a positive attitude towards formula feeding and only 5% of the sample showed a positive attitude towards breastfeeding. The sample's median score was 48 which also indicated a positive attitude towards formula feeding. However in contrast to this it could also be argued

that the sample overall had a neutral attitude towards early infant feeding. This is demonstrated as 45% of the sample had a neutral attitude score and the mean score for the sample was 50 which also indicated a neutral attitude score. Overall however the community's attitude towards early infant feeding was found to be more neutral than expected, considering the community's low uptake of breastfeeding.

Research suggests that having a positive attitude towards breastfeeding is a significant predictor of breastfeeding initiation (Paine and Dorea, 2001, Gau, 2003, Kong and Lee, 2004, Shaker et al., 2004, Schlickau and Wilson, 2005, Scott et al., 2006, Giles et al., 2007, Sittlington et al., 2007, Mcmillan et al., 2008 and Dungy et al., 2008). The findings from this research appear to support this belief as the only family that had a positive attitude towards breastfeeding previously breast fed. However, it has to be acknowledged that this family only breastfed their oldest child. The research also showed that all families that had a positive attitude towards formula feeding formula fed their infants. Families with neutral attitude scores either chose to breast or formula feed their infants. 78% of the sample with neutral attitude scores formula fed their infants and 22% of this sample breastfed their infants. Research by Sittlington et al. (2007) reported that mothers with neutral attitude scores do not hold strong beliefs regarding early infant feeding. They reported from their research that antenatally the feeding intentions of these family's is often undecided. This is also supported by Dungy et al. (2008) who reported that a neutral attitude score suggests that a woman's attitude towards early infant feeding is not fully formed. Dungy et al.'s (2008) research also suggests that women with neutral attitude scores would be ideal targets for focused interventions aimed at promoting breastfeeding. Dungy et al. (2008) therefore suggests that targeting women with

neutral attitude scores may increase breastfeeding initiation. If this is applied locally to the Gypsy and Traveller community sampled, the research suggests that 45% of the community could be viewed as undecided in their early infant feeding intentions, as they had neutral attitude scores. Applying Dungy et al.'s (2008) and Sittlington et al.'s (2007) research therefore implies that targeting Gypsy and Traveller women with neutral attitude scores with focused interventions aimed at promoting breastfeeding could potentially increase the breastfeeding initiation rate in the community.

This research has shown that having a positive attitude towards breastfeeding does not always result in breastfeeding initiation. However the family that had a positive attitude towards breastfeeding did comment on completing the questionnaire that they wished they had breastfed their youngest child. They reported that they did not breastfeed due to family disapproval. This therefore suggests that although attitudes towards early infant feeding are indicative of feeding intentions other factors may also influence whether a mother finally decides to breastfeed.

More specific information about the community's attitudes towards early infant feeding was obtained by examining their responses to each of the seventeen statements in the IOWA infant feeding attitude scale. In general the results showed that the community had neutral views to statements one (the dietary benefits of breastfeeding only last while the baby is having breast milk), nine (babies fed breast milk are healthier than babies fed bottle milk), thirteen (breast milk is more easily digested than bottle milk) and fourteen (bottle milk is as healthy for a baby as breast milk) which all assessed the community's knowledge of the health benefits

associated with breastfeeding. These neutral responses suggest that women from the Gypsy and Traveller community may benefit from receiving more information about the health benefits of breastfeeding.

The community also on average strongly agreed with statement two (bottle feeding is easier than breastfeeding) and strongly disagreed with statement fifteen (breastfeeding is easier than bottle feeding). This suggests that the community in general believes that breastfeeding is significantly harder than formula feeding. This perception could stem from the fact that most Gypsy and Traveller women formula feed their infants, so formula feeding is normalised within their culture. It could also be related to the fact that none of the sample breastfed for more than six weeks. Health Promotion England (2000) acknowledges that many families initially find breastfeeding difficult however it tends to improve and becomes easier with time, patience and perseverance. It is therefore possible that Gypsy and Traveller women which have historically initiated breastfeeding may have stopped due to early difficulties and then verbalised their problems associated with early breastfeeding to other Gypsy and Traveller women. Research by Dion (2008) highlights that in the Gypsy and Travelling community there is a “strong oral tradition” (p33) and information is readily passed verbally from one generation to the next. This process if negative would therefore reinforce the belief amongst the Gypsy and Traveller community that breastfeeding is difficult. The community’s responses to statements two and fifteen suggest that additional breastfeeding support should be provided to any Gypsy or Traveller woman that chooses to initiate breastfeeding. This is recommended as breastfeeding is rare in the community and increasing breastfeeding support will hopefully help community members that choose to

breastfeed sustain it. This could also potentially mean that long term more Gypsy and Traveller women will breastfeed longer and therefore experience and hopefully verbalise more of the benefits associated with breastfeeding.

The community also on average strongly agreed with statement six (bottle feeding is a better choice if a mother plans to work outside the home) and statement eight (women should not breastfeed in public places such as restaurants). These responses suggest that the Gypsy and Traveller community sampled do not agree with breastfeeding in public places. In total 90% agreed with statement six and 65% agreed with statement eight. Previous qualitative research by Dion (2008) indicated that the community had an aversion to personal matters being discussed. Dion (2008) also suggested that the presence of social taboos may be the main reason for the low breastfeeding rate observed in the community. The presence of social taboos may explain the attitudes shown within this research towards breastfeeding in public places. Additional research into the reasons behind these observed attitudes would greatly benefit the design of any future interventions aimed at increasing breastfeeding initiation. This would improve the effectiveness of any intervention and ensure that it is culturally appropriate.

The findings discussed above provide additional information about the community's attitudes towards early infant feeding. This research recommends that these findings should be considered in the future if any focused interventions are developed that aim to improve the breastfeeding initiation rate amongst Gypsies and Travellers.

This research also explored the sample's demographic characteristics. The sample consisted of a mixture of Romany Gypsies and Irish Travellers. The majority of the sample was married, between the ages of twenty one and thirty and had on average two children. They were also found to mainly live in trailers, travel at least once a year and all had children under the age of two. Approximately half of the women sampled reported that they had difficulty reading health literature. These demographic characteristics were collected so that the total attitude scores of the sample could be analysed against these demographic variables. The results found no significant difference between these variables and the community's total attitude scores. The results did however show a significant difference when the samples total attitude score was compared to their previous early infant feeding practice. This result therefore confirms that the sample's previous early infant feeding practice was more influential on their total attitude scores than any of the other extraneous demographic variables measured.

The location of the Gypsy and Traveller community in Western Cheshire Primary Care Trust is also worth discussing. This research has demonstrated that the Gypsy and Travelling community are not equally dispersed throughout Western Cheshire Primary Care Trust but appear concentrated in specific locations. The community was found to mainly reside in rural Cheshire. The location of the Gypsy and Travelling community is worth considering as the author is aware anecdotally that historically resources and focused intervention aimed at improving health have predominantly targeted Western Cheshire Primary Care Trusts larger towns like Ellesmere Port which overall are deemed more deprived and historically rural Cheshire has received less health promotion funding and resources.

5.3. Reflections and Limitations of the methods used, reliability, validity and rigor

On reflection there were benefits and limitations to the research methodology used. The main benefit was that both of the questionnaires obtained high response rates. The response rate to the first questionnaire was 100% and the second questionnaire was completed by 95% of participants approached. On reflection this high response rate was achieved in the first questionnaire as the author ensured that the questionnaire was simple and quick for practitioners to complete and only collected necessary information. The author also ensured that the information requested would be easily available to practitioners. The author's professional experience of working as a Health Visitor in Western Cheshire Primary Care Trust was fundamental to this questionnaire's design and significantly contributed to the high response rate it achieved.

The second questionnaire's response rate was higher than the author expected. A 95% uptake was a significant achievement as the Gypsy and Traveller community are known to be hard to reach group (Parry et al., 2004). On reflection this high response rate was achieved as the questionnaire was designed and administered by practitioners that were experienced in working with the Gypsy and Traveller community. This experience was important in designing the questionnaire as the author ensured that it was quick and simple for participants to complete, accounted for the community's low literacy levels and did not contain information that the community may find unduly sensitive. Advice was also sought from the Gypsy and Traveller community on the questionnaire's content and design prior to

administration. This is likely to have contributed to the high uptake obtained as Ensign (2003) reports that close working and liaison with hard to reach communities is essential when undertaking any research involving them.

The second questionnaire's high response rate was also achieved as the questionnaire was administered by practitioners known to the community. This belief is supported by previous research by Fitzpatrick et al. (1997) and Parry et al. (2004) who acknowledged that Gypsies and Travellers have a general mistrust of non-Gypsies or Travellers and may be sensitive to intrusion and reluctant to give information to someone that they are unfamiliar with. This therefore suggests that using Health Visitors, who are known to the community, to administer the second questionnaire, is likely to have significantly increased its uptake.

The second questionnaire also used face to face interviews. These were useful methodologically as they ensured that the questionnaire was understood by each participant and guaranteed that every question was accurately completed.

The main limitation of this research was the use of convenience sampling to acquire the sample for the second questionnaire. Ideally the second questionnaire would have been completed by the total population of Gypsies and Travellers identified in Western Cheshire Primary Care Trust. Obtaining information from the total population was however not possible in the time allocated for this research as a significant proportion of the Gypsy and Traveller community are transient especially over the summer months. It was also unrealistic to envisage that Health Visitors had the time or capacity to undertake additional visiting within the set timeframe to

complete this research. Therefore in order to achieve a total population sample a longer time frame would have been needed to undertake this research.

The main disadvantage to this research using convenience sampling is that the sample may not be representative of the actual population of Gypsies and Travellers in Western Cheshire Primary Care Trust's attitude towards early infant feeding. Using this sampling method could therefore have affected the community's total attitude score. This research tried to minimise this effect by sampling approximately 50% of the population and ensuring that Heath Visitors did not "handpick" the sample but approached families during routine home visits. It is however acknowledged that in using this approach the sample is likely to have missed the most transient families and it is also more likely to contain families with younger children as in general Health Visitors visit these families more frequently. In examining the early infant feeding practice of the families sampled the author also recognises that the results of the second questionnaire may portray a slightly more positive total attitude score towards breastfeeding in the sampled population compared to the actual total population. This is acknowledged as 10% of the sample previously breastfed their infants compared to 2.7% of the total population of Gypsies and Travellers in Western Cheshire Primary Care Trust.

Another possible limitation of this research is that family Health Visitors were used to identify the total population of Gypsy and Traveller families permanently registered with a General Practitioner in Western Cheshire Primary Care Trust. This research acknowledges the possibility that Health Visitors may have missed or incorrectly identified some Gypsy and Traveller families. The results of the second

questionnaire however indicate that Health Visitors generally correctly identified local families, as all of the families sampled in the second questionnaire identified themselves as either being Romany Gypsies or Irish Travellers. It is however acknowledged that the group most likely to have been missed by Health Visitors are families from the Gypsy and Travelling community that are resident in housing. These families are most likely to have missed as they may appear less culturally distinct to inexperienced practitioners.

Another possible limitation is that this research used family Health Visitors to administer the second questionnaire. It is acknowledged that using more than one practitioner to undertake research could potentially affect the research's validity. This research however minimised this potential impact by designing the questionnaire so it was fully structured and by ensuring that every practitioner was provided with clear written instructions to follow when undertaking the research. The author also acknowledges that using family Health Visitors could have potentially influenced the samples responses to the Iowa infant feeding attitude scale. Researchers were advised to inform families that there were no correct answers in the questionnaire. However it needs to be acknowledged that some families may have answered the questionnaire with responses that they thought would gain practitioner approval. This is however a potential limitation with using known healthcare practitioners.

This research also needs to recognise that certain members of the Gypsy and Traveller community that reside in Western Cheshire Primary Care Trust were excluded from this research. The groups excluded were families with a temporary General Practitioner and no General Practitioner. This research acknowledges that

these groups are likely to have the worst access to health care and potentially the poorest health. This view is also supported by research by Parry et al. (2004) who acknowledged that having poor access to General Practitioner services adversely affects health. However, it was not possible for these groups to be included in this research, as Health Visitors are not routinely made aware that these families are residing in their area. Therefore an accurate sample of these families could not be obtained from Health Visitors.

Finally the author needs to acknowledge that this was a small scale exploratory study. The findings of this research are directly applicable to the Gypsy and Travelling community within Western Cheshire Primary Care Trust. However, the results are not generalisable to the UK population of Gypsies and Travellers. In order to make this research generalisable to the UK population of Gypsies and Travellers more research would be required on these topics on a much larger scale.

6. CONCLUSION AND RECOMMENDATIONS

Gypsies and Travellers have been described as the most socially excluded group in society (Van Cleemput and Parry, 2001). UK healthcare policy has emphasised the importance of targeting socially excluded groups and tackling existing health inequalities (DH 2004a, DH, 2004b, DH, 2003a, Acheson, 1998). The literature review undertaken for the purpose of this research demonstrated the lack of high quality research available on the health of Gypsies and Travellers. The most comprehensive study available demonstrated that Gypsies and Travellers have poorer health and significantly more self reported symptoms of ill health compared to average UK residents, English speaking ethnic minority groups and socio-economically disadvantaged White UK residents (Parry et al., 2004). This research confirmed that inequalities in health exist between Gypsies and Travellers and their non Gypsy and Traveller counterparts even when accounting for deprivation and social exclusion.

The area that this research chose to specifically explore was the early infant feeding practice of Gypsy and Traveller women and their attitudes towards breast and formula feeding. These topics were selected as they were previously unexplored in research and the Department of Health (2009) recognises that choosing to breastfeed infants is known to play an important role in improving health and reducing health inequalities. This research was therefore felt to be important as if breastfeeding rates were found to be low amongst Gypsy and Traveller women then establishing ways to improve its uptake would help improve the community's overall health and assist in tackling the known health inequalities.

This research established that most Gypsy and Traveller women in Western Cheshire Primary Care Trust chose to formula feed their infants and the breastfeeding rate in this community is very low. The rate was found to be 2.7% at birth and 0% at six to eight weeks. This rate was significantly lower than the UK national average and was also found to be substantially lower than the average for Western Cheshire Primary Care Trust. In conjunction with this, this research also explored parental attitudes towards breast and formula feeding. This was explored as previous research (Ho and McGrath, 2010) recognised that parental attitudes are a modifiable factor that could affect breastfeeding initiation. Overall this research established that the community had a more neutral attitude towards early infant feeding than expected, as 45% of the families sampled were found to have neutral attitude scores. This is significant as research by Dungy et al. (2008) and Sittlington et al. (2007) suggest that women with neutral attitude scores do not have strong beliefs regarding early infant feeding and their feeding intentions antenatally are often undecided. These statistics are important as research (Dungy et al., 2008) suggests that women with neutral attitude scores may be amenable in their infant feeding practice and therefore antenatally would be ideal targets for focused interventions aimed at promoting breastfeeding.

The findings of this research have provided new information about the Gypsy and Traveller community. Prior to undertaking this research no statistics were available on the early infant feeding practice of local Gypsy and Traveller women. There was also no research information available about this community's attitude towards breast and formula feeding. Establishing that the local Gypsy and Traveller community has a very low uptake of breastfeeding has provided evidence for

targeting this area. This research has also ascertained that 45% of the women sampled had a neutral attitude towards early infant feeding. This has also provided evidence that interventions aimed at promoting breastfeeding may be worthwhile within this community.

This research however recommends that more research is undertaken before any focused interventions aimed at promoting breastfeeding are implemented. This is felt to be important in order to understand if there are any specific cultural barriers which restrict breastfeeding in this community. In general the attitude scores provided evidence that the community would benefit from receiving more information on the health benefits of breastfeeding and they also indicated that women from the Gypsy and Traveller community who initiate breastfeeding may require additional breastfeeding support.

The information provided from this research should be used to inform local practice. It is therefore important that local midwives and Health Visitors who work with the Gypsy and Traveller community are aware of the results of this research. This is important as these practitioners have direct contact with the community and are responsible for the general promotion of breastfeeding. The author feels that it is also important that commissioners within Western Cheshire Primary Care Trust are aware of these results, as the Primary Care Trust has a Public Service Agreement Indicator (HM Government, 2008) that aims to increase the prevalence of breastfeeding at six to eight weeks. It is therefore important that commissioners are aware of this information as they have the finances to request further research and

they also have the capacity to prioritise and target specific health needs within the Primary Care Trust to enable change in practice and health improvement.

In order to make the results of this research generalisable to the UK population of Gypsies and Travellers more research is required. The author recommends that the research could be made generalisable by the research being replicated at a number of pilot Trusts throughout the UK. This methodology mirrors the technique used by Parry et al. (2004) to make the results of their initial research in Sheffield about the health needs of the Gypsies and Travellers generalisable to the UK population.

The results of this research could also be used to form the basis for further research within Western Cheshire Primary Care Trust. Following the completion of this research the author recommends that further qualitative research is undertaken examining whether specific culture barriers exist towards breastfeeding in the Gypsy and Traveller community. The author recommends that this research is undertaken before any specific interventions aimed at promoting breastfeeding are implemented. Undertaking this further research is important as it would add depth to the statistical information obtained in this research study and it would also provide Western Cheshire Primary Care Trust with more detailed explanations regarding any cultural influences which could impact the low breastfeeding rate observed in the local Gypsy and Traveller community.

7. SELF REFLECTION

The experience of undertaking this research has significantly broadened my skills and understanding of the research process. I found completing the ethics applications and attending the North West Research Ethics Committee meeting at Alder Hey Hospital a challenging but ultimately rewarding experience. Attending the Research Ethics Committee meeting enabled me to understand the level of scrutiny that research projects are subjected to in the National Health Service and it also highlighted the importance of researchers having clarification on the smallest of details. On reflection I managed to obtain ethical approval quickly for this research project. This was essential due to the transient nature of the Gypsy and Traveller community. I obtained ethical approval quickly by being organised and thorough with my ethics applications, adhering to my research schedule and ensuring I had completed all the necessary documentation in advance.

Undertaking this research has also given me confidence and increased my knowledge and understanding of the Gypsy and Travelling community. Professionally, I am now much more aware of the health needs of this community. I am also more confident in my ability to engage this community in research. My confidence has increased due to the positive feedback I received from the Gypsy and Traveller community on the content of my second questionnaire and also by the high response rate this research obtained. I feel professional and personally that this is a significant achievement as the Gypsy and Traveller community are known to be a hard to reach group.

Having completed this research I now hope to publish this study's findings. I also plan to ensure that the results of this study are fed back to Western Cheshire Primary Care Trust, the local health care commissioners and local Health Visitors and midwives. I feel this is important to ensure that the findings of this research are used locally and nationally by National Health Service staff and that this research adds to the national research information available on early infant feeding practices of the Gypsy and Travelling community. Professionally undertaking this research has increased my expertise in a specialist area and also encouraged me to use an evidence based approach to share my knowledge and expertise about the Gypsy and Travelling community.

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APPENDIX 1: Search history: the health status of Gypsies and Travellers

Results from Cinahl and Medline

1. CINAHL; gyps*.ti,ab [Limit to: (Language English)]; 99 results.
2. CINAHL; gips*.ti,ab [Limit to: (Language English)]; 6 results.
3. CINAHL; traveller.ti,ab [Limit to: (Language English)]; 122 results.
4. CINAHL; 1 OR 2 OR 3 [Limit to: (Language English) and (Language English) and (Language English) and (Language English)]; 216 results.
5. CINAHL; health ti,ab [Limit to: (Language English)]; 296843 results
6. CINAHL; 4 AND 5 [Limit to: (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English)]; **85 results**.
7. MEDLINE; gyps*.ti,ab [Limit to: (Language English)]; 3006 results.
8. MEDLINE; GYPSIES/ [Limit to: (Language English)]; 218 results.
9. MEDLINE; gips*.ti,ab [Limit to: (Language English)]; 85 results.
10. MEDLINE; traveller.ti,ab [Limit to: (Language English)]; 419 results.
11. MEDLINE; 7 OR 8 OR 9 OR 10 [Limit to: (Language English) and (Language English) and (Language English) and (Language English)]; 3552 results.
12. MEDLINE; Health ti,ab [Limit to: (Language English)]; 747847 results.
13. MEDLINE; 11 AND 12 [Limit to: (Language English) and (Language English)]; **218 results**

APPENDIX 2: Review table examining relevant research investigating the health status of Gypsies and Travellers

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings	Rigour
Barry, Herity and Solan, 1989	Travelling families in the Republic of Ireland	n=649	1 year study: Census data was used. Data was also obtained from hospital databases and interviews with public health nurses and social workers	Descriptive statistics	Very high mortality rates were stated particularly related to congenital and metabolic problems and accidents. Life expectancy of Travellers was lower than the national average	The total population was sampled. Ethical approval was not specified. Methods and results were clearly stated. Limitations were discussed
Barry and Kirke, 1997	Traveller children from the Irish Republic	n=564	Method was not specified. Details were collected in 1987 at birth, first postnatal visit and at 1 year.	Descriptive statistics. Statistical tests were not specified	The community had significantly more congenital abnormalities mainly due to metabolic conditions	The total population was sampled. Ethical approval was not specified. Statistical tests were not specified. Results were simply presented. Limited information was provided on research methods. Limitations were not discussed.
Dion, 2008	Gypsies and Travellers resident in Bournemouth and Poole	n=9	Semi-structured interviews	Grounded Theory	No difference was identified in Gypsies and non-Gypsies perceptions of health. It identified beliefs of fatalism and a strong oral tradition.	The sample was composed of women known to the researcher. Local research ethics approval was gained. No limitations were discussed.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings	Rigour
	Primary Care Trust				Links were identified between unhealthy behaviours and not teaching children self regulation. Associations between travelling and health were discussed.	Methods were clearly stated. Results were discussed with extracts from the interviews used. Links appeared to have been made however between researchers personal beliefs about the community and health behaviours without clear evidence.
Feder, Vaclavik and Streetly, 1993	Gypsy and Traveller children presenting in 2 GP practices or A&E in East London compared to a control group. All children 10 months to 6 years	n=72 Gypsy and Traveller children n=106 control children	Data was collected between 1988-1990 through parental reports, computerised records and child health records	A number of statistical tests were used	Gypsy and Traveller children have lower completion rates for measles, diphtheria, tetanus and polio than the control group. Poorer rates were attributed to a poorer access to services.	The sampling method was stated- sample unrepresentative. It was weak methodologically: independent assessment of the data was only seen on 25 Traveller children (not 72). Children were classed as not immunised if immunisation were given over 1 month late. Ethical approval was not specified. Methods and results were stated. Limitations were discussed.
Gordan, Gorman, Hashem and Stewart, 1991	Children under 16 from the Travelling community in Northern Ireland	n=350	A structured questionnaire was completed by Health Visitors and Medical Officers	Descriptive statistics	High levels of congenital abnormalities and consanguinity were reported. Frequent admissions to hospital and low uptake of immunisations were stated.	The total population was sampled. Methods and results were briefly discussed but it lacked detail. No statistical tests were used. Ethical approval was not specified. Limitations were not discussed.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings	Rigour
Hodgins, Millar and Barry, 2006	Irish Traveller women attending specific community projects	n=41	Focus group-examining vignette	Thematic content analysis	It demonstrated the complexities of the lay perceptions of health and health inequalities. It raises questions about the presence of depression and domestic violence in the Travelling community	Purposive sampling was used. Ethical approval was not specified. Methods and findings were clearly stated. Extracts from focus groups were cited in the text. Limitations were discussed.
Linthwaite, 1983	Part 1: Traveller mothers with children under 5 from East Anglia Part 2: GPs and local health professionals	Part 1: n=265 Traveller mothers Part 2: n=39 GPs n=33 health professionals	Data was collected between 1981-1982. Surveys were completed by all.	Descriptive statistics	Gypsies and Traveller children have lower birth weights, more disabilities, more accidents and less immunisations. A greater rate of perinatal mortality was also reported. Mothers claimed they were refused treatment from GPs. Health professionals acknowledged Gypsies and Travellers did not access adequate preventative care.	The evidence related to health experience was mainly anecdotal. It was weak methodologically. The survey was unlikely to be representative of whole Travelling community.
Pahl and Vaile, 1988	Traveller women and children under 5 in Kent	n=263	Surveys: questionnaire and interviews	Descriptive Statistics	Travellers were more settled than anticipated. Most were registered with a GP. High infant mortality, a very low immunisation uptake and a low uptake of dental services were stated.	Problems were identified with data reliability (could not verify information obtained)

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings	Rigour
* Parry et al., 2004	Part 1: Gypsy and Traveller adults in 5 UK locations. Data was compared to an age and sex comparator from the same location. Different socio economic statuses and different ethnic groups were compared. Part 2: Adult Gypsy and Travellers with health problems	Part 1: n=529 Part 2: n=27	Part 1: structured health interview Part 2: In depth interviews using non directive interview questions	Part 1: Descriptive statistics and number of statistical tests were used Part 2: analysed using a framework approach- themes were identified	Part 1: Gypsies and Travellers have a poorer health status and significantly more self reported symptoms of ill health than other UK residents, economically disadvantaged UK residents and English speaking ethnic minority groups. Most marked inequalities are self reported anxiety, chest pain and respiratory problems Part 2: Demonstrated a cultural pride in self reliance. Some fatalistic attitudes were expressed. Barriers to accessing health care were explored and identified	Quota sampling was used. The sampling methods were clearly stated. The methodology and rationale was discussed in depth. Ethical approval was specified. Limitations were discussed. Results were presented clearly.
Van Cleemput and Parry, 2001	Adult Gypsy and Travellers in Sheffield that were age and sex matched to English or Irish residents in an urban area of high social	n=174 (87 from each group)	EQ-5D questionnaire completed by interview	Descriptive statistics and statistical techniques were used: independent t tests and Chi squared	Health status of Gypsies was significantly poorer than the UKs lowest socio-economic group. However, the differences were less significant when age and sex matched to socially deprived resident groups. Health status was however	The total population of Gypsies and Travellers were sampled in Sheffield. The other sample was obtained from the GP register: 3 potential candidates were contacted and the first response was interviewed. Local research ethics approval was granted. Limitations were

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings	Rigour
	deprivation			tests	still poorer for activity, mobility and perception of overall health	discussed. Methods and results were clearly stated.

* Results of this study also published in the following research: Parry, Van Cleemput, Peters, Walters, Thomas and Cooper (2007), Van Cleemput, Parry, Thomas, Peters and Cooper (2007) and Peters, Parry, Van Cleemput, Moore, Cooper and Walters (2009)

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Van Cleemput, P., Parry, G., Thomas, K., Peters, J. and Cooper, C. (2007). Health related beliefs and experiences of Gypsies and Travellers: a qualitative study, *Journal of Epidemiology and Community Health*, 61, 205-2.

APPENDIX 3: Search history: Infant feeding practice of Gypsies and Travellers

Results from Cinahl and Medline

1. CINAHL; gyps*.ti,ab [Limit to: (Language English)]; 99 results.
2. CINAHL; gips*.ti,ab [Limit to: (Language English)]; 6 results.
3. CINAHL; traveller.ti,ab [Limit to: (Language English)]; 122 results.
4. CINAHL; 1 OR 2 OR 3 [Limit to: (Language English) and (Language English) and (Language English) and (Language English)]; 216 results.
5. CINAHL; (infant AND feeding).ti,ab [Limit to: (Language English)]; 2002 results.
6. CINAHL; (breast AND feeding).ti,ab [Limit to: (Language English)]; 2134 results.
7. CINAHL; BREAST FEEDING/ [Limit to: (Language English)]; 5174 results.
8. CINAHL; (bottle AND feeding).ti,ab [Limit to: (Language English)]; 451 results.
9. CINAHL; BOTTLEFEEDING/ [Limit to: (Language English)]; 20 results.
10. CINAHL; (artificial AND feeding).ti,ab [Limit to: (Language English)]; 171 results.
11. CINAHL;5 OR 6 OR 7 OR 8 OR 9 OR 10 [Limit to: (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English)]; 8072 results.
12. CINAHL; 4 AND 11 [Limit to: (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English)]; 1 result.
13. MEDLINE; gyps*.ti,ab [Limit to: English Language]; 3066 results.
14. MEDLINE; traveller.ti,ab [Limit to: English Language]; 419 results.
15. MEDLINE; gips*.ti,ab [Limit to: English Language]; 85 results.
16. MEDLINE; 13 OR 14 OR 15 [Limit to: English Language]; 3552 results.

17. MEDLINE; (infant AND feeding).ti,ab [Limit to: English Language]; 7689 results.
18. MEDLINE; (breast AND feeding).ti,ab [Limit to: English Language]; 10280 results.
19. MEDLINE; (breastfeeding).ti,ab [Limit to: English Language]; 9427 results.
20. MEDLINE; (bottlefeeding).ti,ab [Limit to: English Language]; 73 results.
21. MEDLINE; (bottle AND feeding).ti,ab [Limit to: English Language]; 1767 results.
22. MEDLINE; (artificial AND feeding).ti,ab [Limit to: English Language]; 1671 results.
23. MEDLINE; 17 OR 18 OR 19 OR 20 OR 21 OR 22 [Limit to: English Language]; 23707 results.
24. MEDLINE; 18 AND 25 [Limit to: English Language]; 10 results.

APPENDIX 4: Review table examining relevant research investigating infant feeding practice of Gypsies and Travellers

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings- related to infant feeding	Rigour
Dion, 2008	Gypsies and Travellers resident in Bournemouth and Poole Primary Care Trust	n=9	Semi-structured interviews	Grounded Theory	6 key themes emerged. Infant feeding was mentioned in perpetuating beliefs and behaviours. The poor breastfeeding rate was linked to an aversion to personal matters being discussed in the community	The sample was composed of women known to the researcher. Local research ethics approval was gained. No limitations were discussed. Links to infant feeding practice was not clearly presented in the results. The researcher appears to have made the link between poor breastfeeding rates and an aversion to personal matters without clear evidence.
Haines, 2008	n/a	n/a	Article is a letter to a magazine	No new research. Personal comment re: breastfeeding and Romany Gypsies	Reported she knows family members from the Romany Gypsy Community who do breastfeed. She was surprised that the breastfeeding rate is thought to be low amongst Gypsies and Travellers	One person's experience. Comment rather than research.
Mccann, 1987	Traveller population of Newry	n=5	Research interview	A brief description of finding. No information given regarding	A negative attitude towards breastfeeding was reported. Artificial feeding was reported to be the excepted norm. Participants had limited	The sample was composed of women known to the researcher. Ethical approval was not specified. No limitations were discussed.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings- related to infant feeding	Rigour
				questioning technique or types of questions asked.	knowledge of infant nutrition	The data collection method used was not discussed. Results were not clearly stated.
McLeish, 2008	n/a	n/a	The article discusses the literature related to Gypsies and Travellers access to maternity services	No new research was stated in the article. The author applies previous research findings to the maternity services.	The article reports most Travellers do not breastfeed. The article reports this maybe because members of the community are embarrassed to undress in front of others.	It is unclear where the information on infant feeding was obtained from. The article applied previous research rather than generating new information
Reid and Taylor, 2007	Traveller women aged 19-42	n=13	Feminist research methodology using unstructured non directive interviews	Guided by established frameworks for qualitative research	Bottle feeding was reported to be well established in the Traveller culture. Women reported to be too 'shamed' to breastfeed mainly due to lack of privacy and embarrassment. Breastfeeding culturally unacceptable.	The sample was obtained by snowball sampling. Local ethical approval was obtained. The main focus of the study was women's experiences of maternity care. Data collection, limitations and results were discussed.
Rhodes, 2005	n/a	n/a	The article discusses Gypsies and Travellers health and access to	No new research was stated. It was more a comment on the health status of	Reported breastfeeding is rare	Unclear where information on infant feeding was obtained from, possibly authors personal experience with the community. Article applied previous research rather than

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings- related to infant feeding	Rigour
			health care	Gypsies and Travellers.		generating new information

References

Dion, X. (2008). Gypsies and Travellers: cultural influences on health. *Community Practitioner*, 81 (6), 31-34.

Haines, C. (2008). Letters. *Midwifery Matters*, 117, 31.

McCann, V. (1987). Health education for a traveller community. *Health Visitor*, 60, 293-295.

McLeish, J. (2008). Gypsy and Traveller women: the road to better care. *The Practising Midwife*, 11 (1), 12-14.

Reid, B. and Taylor, J. (2007). A feminist exploration of Traveller women's experiences of maternity care in the Republic of Ireland. *Midwifery*, 23 (3), 248-59.

Rhodes, S. (2005). Gypsies' and Travellers' health. *Community Practitioner*, 78 (9), 303.

APPENDIX 5: Search history: The influence of parental attitudes on early infant feeding

Results from Cinahl and Medline

1. CINAHL; breastfeeding.ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 3610 results.
2. CINAHL; breast and feeding.ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 1245 results.
3. CINAHL; (infant AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 1298 results.
4. CINAHL; (bottle AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 260 results.
5. CINAHL; (bottlefeeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 6 results
6. CINAHL; (artificial AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 110 results.
7. CINAHL; 1 OR 2 OR 3 OR 4 OR 5 OR 6 [Limit to: Publication Year 2001-2011 and (Language English) and (Language English) and (Language English) and (Language English)]; 5310 results.
8. CINAHL; attitud*.ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 17776 results.
9. CINAHL; 7 AND 8 [Limit to: Publication Year 2001-2011 and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English)]; **241 results**.
10. MEDLINE; breastfeeding.ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 6047 results.

11. MEDLINE; breast and feeding.ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 3797 results.
12. MEDLINE; (infant AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 3201 results.
13. MEDLINE; (bottle AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 599 results.
14. MEDLINE; (bottlefeeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 21 results
15. MEDLINE; (artificial AND feeding).ti,ab [Limit to: Publication Year 2001-2011 and (Language English)]; 866 results.
16. MEDLINE; 10 OR 11 OR 12 OR 13 OR 14 OR 15 [Limit to: Publication Year 2000-2010 and (Language English) and (Language English) and (Language English) and (Language English)]; 11537 results.
17. MEDLINE; attitud*.ti,ab [Limit to: Publication Year 2000-2010 and (Language English)]; 36662 results.
18. MEDLINE; 16 AND 17 [Limit to: Publication Year 2000-2010 and (Language English) and (Language English) and (Language English) and (Language English) and (Language English) and (Language English)]; 383 results.

APPENDIX 6: Review table examining relevant research investigating the influence of parental attitudes on early infant feeding

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
Dungy, McInnes, Tappin, Wallis and Oprescu, 2008	Pregnant women and members of their social network in Easterhouse area of Glasgow	n=49 whole study n=14 social network members were assessed	The IIFAS questionnaire was completed antenatally by all women. Data on actual feeding at birth was retrieved from the local hospital. Social network members completed additional IIFAS questionnaire.	Descriptive statistics and a range of statistical tests were implemented.	Overall a neutral attitude score towards breastfeeding was demonstrated. It reported a higher IIFAS score was significantly associated with breastfeeding postnatally.	The sampling procedure and methods were specified. Ethical approval was granted by Primary Care Local Research Ethics Committee. Results were clearly presented. Limitation to the study were stated.
Gau, 2003	Postpartum breastfeeding women attending 12 Taiwan hospitals. 7 hospitals were in the experimental group and 5 were in the	n=4610	A quasi-experimental pre-post design. A lactation intervention programme was used in the experimental group and not in the control. All participants were	Descriptive statistics and a variety of statistical tests were implemented.	The biggest factor affecting the decision to breastfeed was personal inclination. The experimental group had a better knowledge and a more positive attitude towards breastfeeding. They also demonstrated better breastfeeding rates in hospital and	Ethical approval was not specified. The methods and sampling technique were stated. Strengths and limitations were discussed. Results were clearly stated.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
	control group		asked to complete a questionnaire		after discharge.	
Giles, Connor, McClenahan, Mallett Stewart-Knox and Wright, 2007	School aged children 13-14 years from Northern Ireland	Part 1: n=48 Part 2: n=120	Part 1: Focus Group Part 2: Questionnaire using the theory of planned behaviour.	Part 1: Data was analysed using the theory of planned behaviour. Part 2: Descriptive statistics and statistical tests were implemented	Part 1: themes showed that children lacked knowledge and that their attitudes to infant feeding were influenced by their mothers and societies negative attitudes towards breastfeeding in public. Part 2: subjective norm, followed by attitudes towards breastfeeding were found to have the most significant correlation with intent	Ethical approval was not specified. The sampling and methods were stated. Limitations were not discussed. Extracts from focus groups were quoted. The results were clearly presented.
Kong and Lee, 2004	Primiparous mothers with normal deliveries at 16 maternity hospitals in Hong Kong	n=230	A descriptive survey. All participants were asked to complete a questionnaire and 26 participants took part in an in depth interview.	Quantitative data was analysed using descriptive statistics. A variety of statistical tests were implemented. Content analysis was undertaken of qualitative data.	A mother's knowledge and attitude about breastfeeding are important factors which influence a woman's infant feeding choices.	Ethical approval was granted from the university ethics committee and all of the hospitals involved. The methods and sampling was discussed. Some limitations to the study were stated.
Mcmillan, Conner,	Primigravida pregnant	n=248	The questionnaire	Quantitative analysis was used	Having a positive attitude towards	Limitations were reported. The sampling procedure was

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
Woolridge, Dyson, Green, Renfrew, Bharj and Clarke, 2008.	women from areas of economic hardship		was completed by pregnant women and hospital staff	using the theory of planned behaviour. Demographic factors analysed to investigate predictors of breastfeeding shortly after birth, at discharge from hospital, at 10 days and 6 weeks	breastfeeding was a significant predictor of breastfeeding intention and increased breastfeeding at birth, discharge and 10 days.	specified. Ethical approval was granted by the Multi-centre Research Ethics Committee and the Local Research Ethics Committee. Detailed results were presented.
Paine and Dorea, 2001	Women were recruited from the maternity wards of 2 public hospitals in Brazil	n=246	A verbal questionnaire was completed antenatally and at 1 month after birth	Data was analysed using descriptive statistics. A variety of statistical techniques were implemented.	Maternal attitudes and a woman's perception of support from others are more significant predictors of breastfeeding intention than demographic factors	Ethical approval was not specified. The methods and sampling technique was stated. Results were clearly presented. Limitations were not discussed.
Schlickau and Wilson, 2005	Hispanic participants who took part in peer modelling programme in Wichita, Kansas	n= 2 key informants and n=6 general informants	A qualitative study exploring breastfeeding beliefs, attitudes, meanings and practice using ethno nursing methods	The qualitative data was analysed using QSR NUD.IST software and the themes were described.	A positive attitude towards breastfeeding was reported from participants.	Ethical approval was granted by the Institutional review board. Limitations were discussed. The sampling and methods were clearly stated. Extracts from interviews were reported.
Scott, Binns, Oddy and Graham,	Participants from 2 longitudinal	Part 1 n=556 Part 2	A self administered questionnaire	Quantitative data was analysed using SPSS	In both studies maternal and paternal attitudes towards breastfeeding	Ethical approval was granted by the Human Ethics Committee. The sampling procedure and

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
2006	infant feeding studies administered in Perth	n=587	was completed in hospital and shortly after discharge.	programme.	were found to be a significant predictor of breastfeeding initiation. Attitudes were found to be a more significant indicator than demographic details.	methods were specified. The results were clearly presented. Some limitations to the study were stated.
Shaker, Scott and Reid, 2004	Pregnant women and their primary supporter (8-12 weeks gestation) attending 3 maternity clinics in Scotland	n=108	IIFAS questionnaire was completed and demographic details were collected by face to face interview	Descriptive statistics were presented. A variety of statistical techniques were implemented.	Parents of breastfed infants had a more positive attitude towards breastfeeding and were more knowledgeable about its health benefits and the nutritional superiority of breast milk than parents of formula fed infants.	Ethical approval was not specified. The methods and sampling technique was stated. Possible limitations were discussed. Results were clearly presented.
Sittlington, Stewart-Knox, Wright, Bradbury and Scott, 2007	Expectant mothers in Northern Ireland recruited at an antenatal clinic in Belfast	n=192	Data was collected through participants completing an antenatal questionnaire. Data was also collected the from Northern Ireland maternity system about the family's actual feeding choices at birth.	The data was analysed using descriptive statistics. A variety of statistical techniques were implemented.	A positive attitude to breastfeeding (demonstrated by a high IIFAS score) is a significant predictor of breastfeeding practice.	Ethical approval was granted by Ulster Research Ethical Committee. The methods and sampling technique were stated. The results were clearly presented. Limitations were discussed.

References

- Dungy, C., McInnes, R., Tappin, D., Wallis, A. and Oprescu, F. (2008). Infant feeding attitudes and knowledge among socioeconomically disadvantaged women in Glasgow, *Maternal Child Health Journal*, 12, 313- 322.
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- Schlickau, J. and Wilson, M. (2005). Development and Testing of a Prenatal Breastfeeding Education Intervention for Hispanic Women, *Journal of Perinatal Education*, 14 (4), 24-35.
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APPENDIX 7: The Iowa Infant Feeding Attitude Scale (IIFAS)

For each of the following statements, please indicate how much you agree or disagree by circling the number that most closely corresponds to your opinion (1 = *strong disagreement* [SD], 2 = *disagreement* [D], 3 = *neutral* [N], 4 = *agreement* [A], 5 = *strong agreement* [SA]). You may choose any number from 1 to 5.

	SD	D	N	A	SA
* 1. The nutritional benefits of breastfeeding only last until the baby is weaned from breast milk	1	2	3	4	5
* 2. Formula feeding is more convenient than Breastfeeding	1	2	3	4	5
3. Breastfeeding increases mother infant Bonding	1	2	3	4	5
* 4. Breast milk is lacking in iron	1	2	3	4	5
5. Formula fed babies are more likely to be overfed than breastfed babies	1	2	3	4	5
* 6. Formula feeding is a better choice if a Mother plans to work outside the home	1	2	3	4	5
7. Mothers who formula feed miss one of the great joys of motherhood	1	2	3	4	5
* 8. Women should not breastfeed in public places such as restaurants	1	2	3	4	5
9. Babies fed breast milk are healthier than babies fed formula milk	1	2	3	4	5
*10. Breastfed babies are more likely to be overfed than formula fed babies	1	2	3	4	5
*11. Fathers feel left out if a mother breastfeeds	1	2	3	4	5
12. Breast milk is the ideal milk for babies	1	2	3	4	5
13. Breast milk is more easily digested than Formula	1	2	3	4	5
*14. Formula is as healthy for an infant as breast milk	1	2	3	4	5
15. Breastfeeding is more convenient than formula feeding	1	2	3	4	5
16. Breast milk is less expensive than formula	1	2	3	4	5
*17. A mother who occasionally drinks alcohol should not breastfeed her baby	1	2	3	4	5

Note. Items marked with asterisks are reverse-scored and the scores for each item are then summed. Higher scores indicate more positive attitudes toward breast feeding.

Reference

De la Mora, A., Russell, D., Dungy, C., Losch, M., & Dusdieker, L. (1999). The Iowa Infant Feeding Attitude Scale: Analysis of reliability and validity. *Journal of Applied Social Psychology*, 29 (11), 2380.

APPENDIX 8: Search history: The IOWA Infant Feeding Attitude scale

Results from Cinahl and Medline

1. CINAHL; (IOWA AND Infant AND Feeding AND Attitude AND Scale).ti,ab [Limit to: (Language English)]; 6 results
2. CINAHL; IIFAS.ti,ab [Limit to: (Language English)] ; 4 results.
3. CINAHL; 2 OR 3 [Limit to: (Language English) and (Language English)]; 6 results.
4. MEDLINE; (IOWA AND Infant AND Feeding AND Attitude AND Scale).ti,ab [Limit to: (Language English)]; 9 results
5. MEDLINE; IIFAS.ti,ab [Limit to: (Language English)] ; 5 results.
6. MEDLINE; 2 OR 3 [Limit to: (Language English) and (Language English)]; 9 results.

APPENDIX 9: Review table examining relevant research which utilises the Iowa Infant Feeding Attitude Scale

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
Chambers, McInnes, Hoddinott and Alder, 2007	A systematic review of the tools available to assess parental attitudes	22 papers were evaluated containing 13 different tools	All tools were tested with pregnant or breastfeeding women	The data was analysed by 2 independent reviewers	4 tools had sufficient evidence to support their use which included the IOWA infant feeding attitude scale	The methods and rationale were clearly stated. The results were clearly presented.
De la Mora, Russell, Dungy, Losch, and Dusdieker, (1999).	1. Women inpatients in a Midwestern hospital 48 hours after birth	1. n=125	1. A self reported questionnaire was completed	1. Descriptive statistics were presented. A variety of statistical tests were implemented	1. The attitude score on the questionnaire was found to be highly reliable. IIFAS was found to be a reliable and valid assessment tool.	1. Ethical approval was not stated. The exclusion criteria and sampling was stated. The methods and results were clearly presented. The limitations were discussed.
	2. Women inpatients in a Midwestern hospital 48 hours after birth	2. n=130	2. IIFAS questionnaire and basic demographic details were completed	2. Descriptive statistics were presented. A variety of statistical tests were implemented	2. The attitude score on the questionnaire was found to be highly reliable. IIFAS was found to be a reliable and valid assessment tool.	2. Ethical approval was not stated. The exclusion criteria and sampling was stated. The methods and results were clearly presented. The limitations were discussed.
	3. Women inpatients who were breastfeeding in a Midwestern	3. n=725	3. IIFAS questionnaire and basic demographic detail were collected in	3. Descriptive statistics were presented. A variety of statistical tests were	3. The attitude score on the questionnaire found to be highly reliable. IIFAS was found to be a reliable	3. The limitations were discussed. Ethical approval was not stated. The exclusion criteria and sampling was stated. The methods and

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
	hospital 48 hours after birth		hospital. Telephone interviews were conducted fortnightly for 16 weeks post discharge re: current feeding	implemented	and valid assessment tool. It was acknowledged that the score for reliability was not as strong as in study 1 and 2 but the sample was only breastfeeding mothers.	results were clearly presented.
Dungy, McInnes, Tappin, Wallis and Oprescu, 2008	Pregnant women and members of their social network in Easterhouse area of Glasgow	n=49 whole study n=14 social network members were assessed	The IIFAS questionnaire was completed antenatally by all women. Data on actual feeding at birth was retrieved from the local hospital. Social network members completed an additional IIFAS questionnaire.	Descriptive statistics and a range of statistical tests were implemented.	Overall a neutral attitude towards breastfeeding was demonstrated. A higher IIFAS score was significantly associated with breastfeeding postnatally.	The sampling procedure and methods were specified. Ethical approval was granted by the Primary Care Local Research Ethics Committee. The results were clearly presented. The limitations to the study were stated.
Ho and McGrath, 2011	Breastfeeding women in one public hospital in Taichung city, Taiwan	n= 140 inpatient breast feeding women which reduced to 120 at the 6 week	The IIFAS questionnaire was translated into Chinese. It was completed on mothers prior to hospital discharge. Telephone interviews were	Descriptive statistics and a range of statistical tests were implemented.	Hospital IIFAS scores significantly predicted breastfeeding duration as well as exclusive breastfeeding at 6 weeks postpartum.	The inclusion criterion was stated. Ethical approval was granted. The sampling procedure and methods were specified. The results were clearly presented. The limitations were not discussed.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
		follow up	completed at 6 weeks to obtain feeding data			
Scott, Binns, Oddy and Graham, 2006	Participants from 2 longitudinal infant feeding studies administered in Perth	Part 1 n=556 Part 2 n=587	A self administered questionnaire was completed in hospital and shortly after discharge.	Quantitative data was analysed using SPSS programme.	In both studies maternal and paternal attitudes towards breastfeeding were found to be a significant predictor of breastfeeding initiation. Attitudes were found to be a more significant than other demographic factors.	Ethical approval was granted by the Human Ethics Committee. The sampling procedure and methods were specified. The results were clearly presented. Some limitations to the study were stated.
Shaker, Scott and Reid, 2004	Pregnant women and their primary supporter (8-12 weeks gestation) attending 3 maternity clinics in Scotland	n=108	An IIFAS questionnaire was completed and demographic details collected by face to face interview.	Descriptive statistics were presented and a variety of statistical tests were implemented.	Parents of breastfed infants had a more positive attitude towards breastfeeding. They were also more knowledgeable about its health benefits and the nutritional superiority of breast milk than parents of formula fed infants.	Ethical approval was not specified. The methods and sampling technique were stated. Possible limitations were discussed. The results were clearly presented.
Simmie, 2006	Convenience sampling was used. All women attending a shop	N=102	The questionnaire consisted of 35 questions- demographic data, the IIFAS	Descriptive statistics were presented. A variety of statistical tests were	Asian and Caucasian participants who breastfed had a more positive attitude to breastfeeding than	The exclusion criterion was clearly stated. Ethical approval was not specified. The methods and sampling technique were stated.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
	specialising in baby products with children under 2 on one day were invited to participate		questionnaire and information on infant feeding was collected	implemented	those who formula fed.	Possible limitations were discussed. The results were clearly presented
Sittlington, Stewart-Knox, Wright, Bradbury and Scott, 2007	Expectant mothers in Northern Ireland were recruited at an antenatal clinic in Belfast	n=192	Data was collected through participants completing an antenatal questionnaire. Data was also collected from the Northern Ireland maternity system about a woman's feeding choice at birth.	The data was analysed using descriptive statistics. A variety of statistical tests were implemented.	A positive attitude to breastfeeding (demonstrated by a high IIFAS score) is a significant predictor of breastfeeding practice.	Ethical approval was granted by Ulster Research Ethical Committee. The methods and sampling technique were stated. The results were clearly presented. The limitations were discussed.
Wallis, Brinzaniuc, Chereches, Oprescu, Sirlincan, David, Dirle and Dungy, 2008	The study was conducted in Cluj-Napoca, Romania, in 2 gynaecology wards in 2 academic teaching hospitals	n=336 women attending antenatal clinic n=276 women 24 hours after delivery	Questionnaires were completed which contained the IIFAS questionnaire, demographic details, information on infant feeding practice and their views on feeding in	Descriptive statistics were presented. A variety of statistical tests were implemented	The data provided evidence for the reliability and validity of the IIFAS. The IIFAS questionnaire was found to have a reasonable level of internal consistency and robust stability. There was also evidence supporting	The exclusion criterion was clearly stated. Ethical approval was not specified. The methods and sampling technique used were stated. Possible limitations were discussed. The results were clearly presented.

Author and Year	Sample Type	Sample Size	Data Collected	Data Analysis	Findings related to attitude	Rigour
		n=52 postpartum follow up	public places.		criterion validity.	

References

- Chambers, J. A., McInnes, R. J., Hoddinott, P. and Alder, E. M. (2007). A systematic review of measures assessing mothers' knowledge, attitudes, confidence and satisfaction towards breastfeeding. *Breastfeeding Review*, 15, 3, 17-25.
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APPENDIX 10: Questionnaire 1

Part A: To be completed by all Health Visitors

- 1) Name of Health Visitor
- 2) How many Gypsy and Traveller families do you have permanently registered on your caseload? (dates from 01/09/06-01/03/2011)
- 3) How many Gypsy and Traveller children do you have permanently registered on your caseload? (dates from 01/09/06-01/03/2011)

Part B: Only to be completed by Health Visitors with Gypsies and Travellers on their caseload. The following questions only need completing until an answer of 0 is given.

- 4) On your caseload how many individual children (born between 01/09/2006-01/03/2011) from the Gypsy and Travelling community were initially breastfed following birth?

4b) From this number how many individual families breast fed?
- 5) On your caseload how many individual children (born between 01/09/2006-01/03/2011) from the Gypsy and Travelling community were breastfed at 10-14 days?

5b) From this number how many individual families breast fed?
- 6) On your caseload how many individual children (born between 01/09/2006-01/03/2011) from the Gypsy and Travelling community were breastfed at 6-8 weeks?

6b) From this number how many individual families breast fed?

Thank you for taking time to complete this questionnaire

APPENDIX 11: Questionnaire 2

This is a quick questionnaire that will only take a few minutes to complete. If you do not want to do it you can stop at any time. There is no right or wrong answer it just asks for your views on the feeding of young babies.

For each of the following sentences say how much you agree or disagree with them. The chart shows numbers from 1-5. 1 means you really disagree, 2 means you disagree, 3 means you have no opinion, 4 means you agree and 5 means you really agree. Please pick the number matches your views.

	SD	D	N	A	SA
1. The dietary benefits of breastfeeding only last while the baby is having breast milk	1	2	3	4	5
2. Bottle feeding is easier than Breastfeeding	1	2	3	4	5
3. Breastfeeding improves the relationship between mother and baby	1	2	3	4	5
4. Breast milk is lacking in iron	1	2	3	4	5
5. Bottle fed babies are more likely to be overfed than breastfed babies	1	2	3	4	5
6. Bottle feeding is a better choice if a mother plans to work outside the home	1	2	3	4	5
7. Mothers who bottle feed miss one of the great joys of motherhood	1	2	3	4	5
8. Women should not breastfeed in public places such as restaurants	1	2	3	4	5
9. Babies fed breast milk are healthier than babies fed bottle milk	1	2	3	4	5
10. Breastfed babies are more likely to be overfed than bottle fed babies	1	2	3	4	5
11. Fathers feel left out if a mother breastfeeds	1	2	3	4	5
12. Breast milk is the perfect milk for babies	1	2	3	4	5
13. Breast milk is more easily digested than bottle milk	1	2	3	4	5
14. Bottle milk is as healthy for a baby as breast milk	1	2	3	4	5
15. Breastfeeding is easier than bottle feeding	1	2	3	4	5
16. Breastfeeding is cheaper than bottle Feeding	1	2	3	4	5
17. A mother who occasionally drinks alcohol should not breastfeed her baby	1	2	3	4	5

Demographic Details of mothers

(* if other is stated in the questionnaire please expand)

Age: 15-20 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-45 ☐ Other* ☐

Marital Status Married ☐ Single ☐ Divorced ☐

Ethnic Group Romany Gypsy ☐ Irish Traveller ☐ Other* ☐

Type of Accommodation House ☐ Trailer ☐ Chalet ☐
Other * ☐

How often do you travel (move location)? never ☐ once a year ☐
several times a year ☐ often ☐

How many children do you have?

How old is your youngest child?

Do you have difficulty reading health information? Yes ☐ No ☐

How did you feed your youngest child at birth? Bottle fed ☐
Breast fed ☐

Have you ever breastfed? Yes ☐ No ☐

Thank you for completing the questionnaire.

APPENDIX 12: Alterations to the IOWA Infant Feeding Attitude Scale

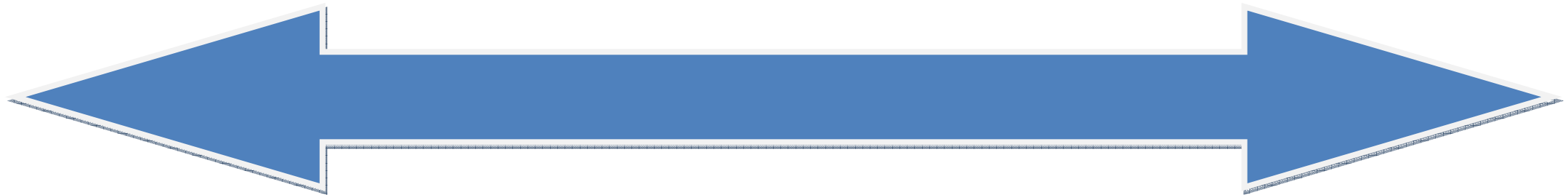
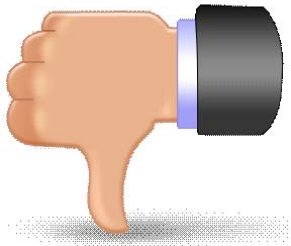
Changes: underlined words removed, words in brackets added to the questionnaire

	SD	D	N	A	SA
1. The <u>nutritional</u> (dietary) benefits of breastfeeding only last <u>until</u> (while) the baby is <u>weaned from</u> (having) breast milk	1	2	3	4	5
2. <u>Formula</u> (Bottle) feeding is <u>more Convenient</u> (easier) than breastfeeding	1	2	3	4	5
3. Breastfeeding <u>increases</u> (improves the relationship between) mother <u>infant bonding</u> (and baby)	1	2	3	4	5
4. Breast milk is lacking in iron	1	2	3	4	5
5. <u>Formula</u> (Bottle) fed babies are more likely to be overfed than breastfed babies	1	2	3	4	5
6. <u>Formula</u> (Bottle) feeding is a better choice if a mother plans to work outside the home	1	2	3	4	5
7. Mothers who <u>formula</u> (bottle) feed miss one of the great joys of motherhood	1	2	3	4	5
8. Women should not breastfeed in public places such as restaurants	1	2	3	4	5
9. Babies fed breast milk are healthier than babies fed <u>formula</u> (bottle) milk	1	2	3	4	5
10. Breastfed babies are more likely to be overfed than <u>formula</u> (bottle) fed babies	1	2	3	4	5
11. Fathers feel left out if a mother Breastfeeds	1	2	3	4	5
12. Breast milk is the <u>ideal</u> (perfect) milk for Babies	1	2	3	4	5
13. Breast milk is more easily digested than <u>formula</u> (bottle) milk	1	2	3	4	5
14. <u>Formula</u> (bottle milk) is as healthy for <u>an infant</u> (a baby) as breast milk	1	2	3	4	5
15. Breastfeeding is <u>more convenient</u> (easier) than <u>formula</u> (bottle) feeding	1	2	3	4	5
16. Breast milk is <u>less expensive</u> (cheaper) than <u>formula</u> (bottle feeding)	1	2	3	4	5
17. A mother who occasionally drinks alcohol should not breastfeed her baby	1	2	3	4	5

Reference

De la Mora, A., Russell, D., Dungy, C., Losch, M., & Dusdieker, L. (1999). The Iowa Infant Feeding Attitude Scale: Analysis of reliability and validity. *Journal of Applied Social Psychology*, 29 (11), 2380.

APPENDIX 13: Visual Tool for Questionnaire 2



1

2

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APPENDIX 14: Information sheet for Health Visitors administering Questionnaire 2

1. Identifying appropriate families

Appropriate families are families on your caseload who are from the Gypsy and Travelling community and have a child under the age of three which is permanently registered with a General Practitioner in Western Cheshire Primary Care Trust.

2. Approaching families

Families should ideally be approached about participating in this research study whilst undertaking a home visit. If this is not possible families may also be approached by telephone. It is essential that Health Visitors administering Survey 2 in the home environment adhere to NHS Western Cheshire's lone worker policy (NHS Western Cheshire, 2010).

3. Discussing Participation

Due to the known low literacy levels amongst Gypsies and Travellers it is important that the second survey is undertaken by face to face interview. It is also essential that no males from the Gypsy and Travelling community are present when this research is discussed. Before undertaking the second survey it is important that the participant information sheet is verbally explained and given to all participants. It is also essential that written informed consent is obtained. If a family does not want to participate do not continue with the research process. It is important that families do not feel pressurised or coerced into undertaking the research. It is also essential that families are informed that your professional relationship will not be adversely affected by them declining to participate in the study.

4. Obtaining Informed Consent

In order to obtain informed consent it is essential that the purpose of undertaking the research has been clearly explained to all participants. It is also essential that you are confident that the participant understands the implications of them taking part in the study. Please obtain written consent using the form provided once you are confident that the participant is able to give informed consent. If you feel informed consent cannot be obtained please do not proceed with the research.

5. Administering Survey 2

Survey 2 is a structured questionnaire which should be read out to participants. Please use the visual tool provided to help participants answer the questions on page 1. If a participant wants to withdraw from the study at any point stop administering the questionnaire and do not ask them to explain their reasons for withdrawal.

6. Handling Data

After the questionnaire has been completed please send the completed consent form and Survey 2 to Kate Pinkney

Please send these forms through the NHS postal system. If the data needs to be stored prior to sending please ensure it is kept on NHS property in a locked cabinet. The data collected is confidential so please ensure that it is not discussed with other families or professionals.

7. Feeding back research findings

Following the study's completion the research findings will be fed back to Health Visitors via the Health Visitor professional meeting. It is envisaged that families from the Gypsy and Travelling community which wish to know the results of the study will be informed of the findings by their named Health Visitor following this meeting.

8. Dealing with complaints or requests for additional information

If additional information is required please contact Kate Pinkney on . Families can either contact Kate directly or she will provide you with the information required. If a family wishes to make a complaint please refer to the information provided on the participant information sheet.

Thank you for agreeing to help with this research. If you have additional questions please contact Kate Pinkney on or by email on

References

NHS Western Cheshire (2010) Lone Worker Policy. Retrieved from Western Cheshire Primary Care Trust website:

www.wcheshirepct.nhs.uk/downloader.asp?.../Policies/.../Lone%20Worker%20Policy%20v1%20Feb%2006

APPENDIX 15: E-mail to Health Visitors

Dear.....,

My name is Kate Pinkney and I am a local Health Visitor based in Frodsham. I am contacting you with Sue Hooley's consent as I am currently undertaking some research as part of my Masters study at the University of Chester. My research is examining the infant feeding practice of Gypsy and Traveller women in Western Cheshire Primary Care Trust and their attitudes towards breast and formula feeding.

I have attached to this email a short questionnaire which should take most of you only a few seconds to complete. The questionnaire initially asks whether you have Gypsies and Travellers on your caseload. It then asks you about their early infant feeding choices. I do not need family details just the number of families you have. Please complete the questionnaire even if you have no Gypsy or Travelling families on your caseload as Health Visitor replies form my study sample.

The questionnaire asks you for your name so I know who I have received replies from. It will not be used in the research. If you are responding as a team please state each Health Visitor's name on the form.

If you would like further information about this research or you have any additional questions please contact me on _____ or reply to this email. If you would prefer to send the questionnaire back by post please send them to: Kate Pinkney,

Thank you for your help and support.

Yours sincerely

Kate Pinkney

APPENDIX 16: Participant Information sheet and Consent Form

Participant Information sheet

1. Study title

The infant feeding practice of Gypsy and Traveller women in Western Cheshire Primary Care Trust and their attitudes towards breast and formula feeding

2. Invitation paragraph

You are being invited to take part in a research study which is being carried out as part of a Masters degree. Before you decide if you want to take part it is important to understand why the research is being done and what is involved. Think about the following information and discuss it with others if you wish. Please ask me if any information is unclear or you have any additional questions.

3. What is the purpose of the study?

This study aims to look at how Gypsy and Traveller women in Western Cheshire Primary Care Trust choose to feed their babies and what are their views about early infant feeding.

4. Why have I been chosen?

You have been chosen to take part in this study as you are a woman from the Gypsy and Travelling community that lives in Western Cheshire Primary Care Trust and has a child under the age of three.

5. Do I have to take part?

No. It is your choice whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you can still withdraw at any time and you do not need to give a reason for withdrawing from the study.

6. What will happen to me if I take part?

You will be asked to complete a short questionnaire by your Health Visitor. It will only take a few minutes to complete.

7. What are the possible disadvantages and risks of taking part?

There are no known risks of participating in the study. The main disadvantage is the time required to complete the short questionnaire. Saying no to the study will not affect your relationship with your Health Visitor.

8. What are the possible benefits to you of taking part?

There is no advantage to the participant.

9. Will my taking part be kept confidential?

All information which is collected will remain strictly confidential. Any information about you or your individual views will be made anonymous so that you cannot be recognised from it.

10. What will happen to the results of the research study?

The research study's findings will be initially reported to the University of Chester. It is also hoped that in the future the study's findings will be published in a health journal. If you wish to know the results of the research study these can be given to you by your Health Visitor following the studies completion.

11. Who is organising/ supporting the research study?

The research study is being organised by Kate Pinkney, a health visitor who regularly works with the Gypsy and Travelling community. The research is supported by Western Cheshire PCT and the University of Chester.

12. Who has reviewed the research study?

The research study has been reviewed and approved by both the NHS and University ethics committee. The researcher is also receiving regular supervision and support from the PCT research department and the University.

13. Who do I contact if I have a complaint?

If you have a complaint about this study please contact Denise Richardson who works for the Patient Advice and Liaison service. You can telephone her on or on or write to her at The patient experience manager, Freepost (CS 1528), 1829 Building, The Countess of Chester Health Park, Liverpool Road, Chester, CH2 1YZ.

14. Contact for further information

If you require any further information about the research please contact Kate Pinkney on 01928 732388.

Thank you for taking part in this research study

Consent Form

Title of Research Study:

The infant feeding practice of Gypsy and Traveller women in Western Cheshire
Primary Care Trust and their attitudes towards breast and formula feeding

Name of Researcher: Kate Pinkney

Participant information number:

1. I confirm that I have had the purpose of the research explained to me. I have been given the information sheet and I have had the opportunity to ask questions.

☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and my rights will not be affected.

☐

3. I understand that data collected during the study may be looked at by individuals from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

☐

4. I agree to take part in the study

☐

Name of Participant

Signature

Date

Name of Researcher or
person taking consent

Signature

Date
